MNP

Review and Analysis of the Government of Alberta's Response to and Recovery from 2013 Floods

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1 Executive Summary

1.1 Introduction

The 2013 Southern Alberta floods were the worst flooding event in the province's history, and one of the largest natural disasters in Canadian history. The speed of onset, sheer scope and magnitude of the flood, and the tremendous resulting damage tested Alberta's emergency management system to a degree never before encountered, and rarely seen globally. In addition to the significant emotional stress and trauma to those impacted, an abbreviated summary of impact is as follows:

- Over 30 communities impacted and declared Local States of Emergency
- Alberta's first ever Provincial State of Emergency declared for the Town of High River
- More than 125,000 persons evacuated - largest evacuation in Canada in more than 60 years
- Approximately 14,500 homes impacted
- 1,600 small businesses impacted
- Almost 2,700 Albertans displaced and required accommodations assistance - temporary neighborhoods, hotels and with friends and family
- Over 985 kilometers of provincial roads affected by flooding
- Damage to approximately 300 bridges as well as other critical infrastructure
- Provincial Operations Centre elevated to Level 4 (highest level) for 24 days
- Estimated total cost of the recovery, when combining provincial Disaster Recovery Program (DRP) funding, additional provincial funding and insurable losses is over $5 billion. Included in these costs were over $200 million in DRP payments to municipalities and First Nations
- A total of 10,594 DRP applications were filed. As of 31 December 2014 over $108 million in DRP payments were made to individual submissions from the following categories:
    - Agriculture
    - Condominium
    - Homeowner
    - Institution
    - Landlord
    - Small Business
    - Tenant

It is a standard practice for the Alberta Emergency Management Agency and the Government of Alberta to conduct a post-event review for all large scale incidents as well as any event that requires activation of the Provincial Operations Centre. Recognizing that the 2013 floods provided a unique opportunity to complete a comprehensive review of their response and recovery capabilities, the Government of Alberta commissioned this independent review.

1.2 Aim, Intent, and Scope

1.2.1 Aim

The Government of Alberta's overarching aim for this review was to examine and assess the efficiency and effectiveness of the province's emergency response and recovery procedures, capabilities and frameworks. This review endeavours to answer the following questions regarding the response to, and recovery from, the 2013 Southern Alberta floods:

- What worked well, why, and how can these successes be sustained?
- What did not work as well as it should, why, and how can these areas be improved?

1.2.2 Intent

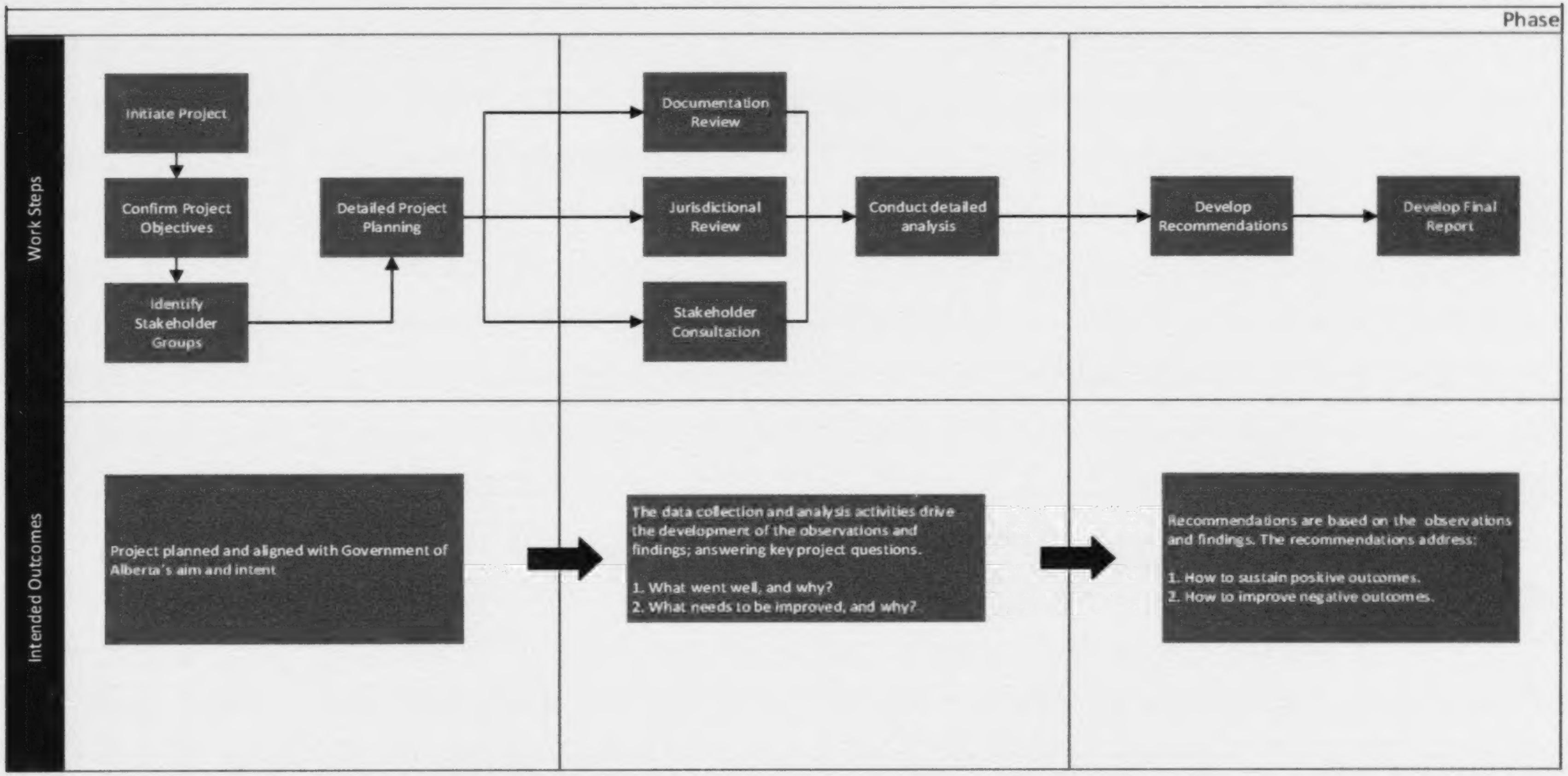
The overall intent and end state of this review is to provide the Government of Alberta with a comprehensive, evidenced based report that can be used as a strategic and operational guide for the future. The report is designed to be the overarching umbrella and capstone review and analysis of the 2013 flood response and recovery, and takes into consideration all other detailed reviews completed and improvement initiatives already implemented or in progress.

1.2.3 Scope

The review period for this report encompasses June 19, 2013 to December 31, 2014. It is important to note that a number of improvement initiatives are ongoing; however, any initiatives completed after December 31, 2014 are outside of the scope of this review.

1.3 Approach

The flowchart below depicts the overall approach undertaken for this review, and the following pages provide additional detail on the approach and intended outcomes.


Phase
Work Steps
Initiate Project
Confirm Project Objectives
Identify Stakeholder Groups
Detailed Project Planning
Documentation Review
Jurisdictional Review
Stakeholder Consultation
Conduct detailed analysis
Develop Recommendations
Develop Final Report
Intended Outcomes
Project planned and aligned with Government of Alberta's aim and intent
The data collection and analysis activities drive the development of the observations and findings; answering key project questions.
1. What went well, and why?
2. What needs to be improved, and why?
Recommendations are based on the observations and findings. The recommendations address:
1. How to sustain positive outcomes.
2. How to improve negative outcomes.

1.3.1 Guiding Principles

In order to achieve the desired aim and end state, the following principles were used to guide the overall approach:

- Effective planning and ongoing coordination with the Government of Alberta project leads
- Comprehensive stakeholder consultation, information gathering and documentation review
- Focused gathering of relevant benchmarking and comparison information
- Analytic and evidenced-based reporting with clear and actionable recommendations

1.3.2 Objective Areas

To guide and focus information gathering, seven (7) specific objective areas for review were identified by the Government of Alberta:

1. Interagency Response & Coordination
2. Public Alerting, Community Evacuation & Communication
3. Evacuee Support & Interim Accommodation
4. Transition from Response to Recovery
5. Health & Safety
6. Provincial State of Emergency
7. Recovery Activities

These objective areas provided a sound framework for information gathering, and results under each objective area are included in Section 3 of the report.

1.3.3 Stakeholder Groups

Six (6) stakeholder groups were identified by the Government of Alberta for participation in stakeholder consultation:

Group #	Group Description	Number of Organizations Interviewed from Group
Group 1:	AEMA and task forces involved in response and recovery	7
Group 2:	External stakeholders and agencies involved in response and recovery	17
Group 3a:	Government of Alberta Ministries involved in response and recovery	10
Group 3b:	Selected Ministers, Associate Ministers, Deputy Ministers and Members of the Legislative Assembly (MLA) from impacted communities	Ministers - 8 MLAs - 7
Group 4:	Municipalities impacted by flooding	28
Group 5:	First Nations impacted by flooding	2

In order to achieve the principle of comprehensive stakeholder consultation, and to ensure that as many voices as possible were heard, over 150 stakeholders representing the above five (5) stakeholder groups participated in interviews.

1.3.4 Documentation Review

Documents related to the province's emergency management system were reviewed in order to develop a clear understanding of Alberta's system and capabilities prior to the 2013 floods, as well as the improvement initiatives undertaken since. A 160 item bibliography and list of documents and references reviewed is found in Appendix F – Bibliography and Documents Reviewed.

1.3.5 Jurisdictional Review

For comparison purposes, a jurisdictional review was completed to consider the response and recovery efforts from large-scale disaster events of similar size and scope to the 2013 floods. Events were chosen from an account of previous disasters in Alberta and Canada, as well as in the United States, Australia, New Zealand and Chile. In addition, a comparison of disaster recovery programs and emergency management legislation developed and implemented by Canadian provinces and territories was completed and a summary is included in Appendix D – Comparison of Provincial / Territorial Disaster Recovery Programs, and Appendix E – Comparison of Provincial / Territorial Emergency Management Legislation.

In addition, and as part of the jurisdictional review, interviews were also conducted with individuals from international groups, including:

- Former Commander, Joint Task Force Katrina
- Director, New York City Office of Emergency Management
- Director, United States Federal Emergency Management Agency
- Emergency management staff, Con Edison Incorporated
- Various officials, Ministry for Police and Emergency Services, Australia
- Various officers, Louisiana Police Department
- Various officials, State of Louisiana and Louisiana State University
- Correspondent and journalist, CNN coverage of major North American disasters

1.3.6 Analysis & Reporting

Upon completion of data gathering, stakeholder consultation and the jurisdictional review, detailed analysis was undertaken and key observations and findings emerged. Observations and findings were grouped into five (5) main themes, described in detail below. These themes help form the framework for the operational and strategic guide that this report is intended to provide.

1.4 Summary of Findings

1.4.1 Themes

While the results that emerged from the analysis are well aligned to the pillars of emergency management, it became clear that the majority of the observations, findings and recommendations mutually support five (5) overarching and interrelated themes. Issues and details within each of these themes cross the different pillars of emergency management and incorporate observations related to the seven (7) objective areas. The themes are as follows:

1. **People, Attitude and Approach**: The attitude and approach that people throughout the Government of Alberta demonstrated during response and recovery, as well as recognition of the emergency management skills and expertise resident within the government.

2. **Provincial Frameworks, Structures, and Plans**: The provincial level frameworks, structures and plans intended to guide, direct, harness and coordinate emergency management in Alberta. This includes, but is not limited to: legislation and the Alberta Emergency Plan; Public Safety Governance; Ministerial Task Force and Recovery Task Force structures; Emergency Social Services Framework; Disaster Recovery Program; the role of elected officials; Provincial Operations Center infrastructure; and, Government of Alberta Business Continuity Program.
3. **Emergency Management Capacity**: The activities and programs required to ensure that frameworks, structures and plans can be effectively executed at the provincial and municipal levels. This includes, but is not limited to: training, awareness, and exercises; Field Officers, regional approach, and municipal capacity building; emergency management in First Nations; staffing levels and capacity; and, contracting service providers.
4. **Communications**: The processes and structure that enable the passage and flow of information within the Government of Alberta, from the Government of Alberta to municipalities and First Nations, and from the Government of Alberta to the public.
5. **Continuous Improvement**: The focus by the Government of Alberta on learning and implementing improvements based on previous emergency events, including improvements made following the 2011 Slave Lake fires, ongoing improvement initiatives, and the requirement to maintain improvement momentum.

The key questions that this review endeavours to satisfy have been answered under the five themes above. Observations under each theme provide details gathered during the review indicating what went well during the response and recovery and what opportunities for improvement were encountered that need to be addressed for the future. Findings are the result of the analysis of observations and discuss why these strengths resulted in favourable outcomes during the event, as well as identifying opportunities for improvement. Recommendations under each theme provide guidance to assist the province in sustaining the success achieved and implementing the opportunities for improvement identified during the response and recovery to the 2013 Southern Alberta floods.

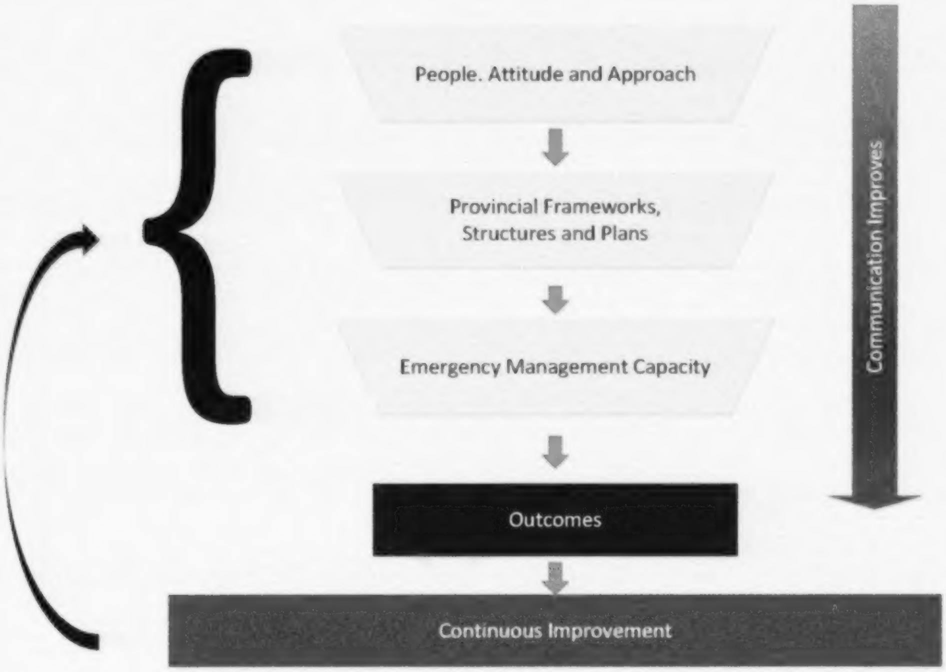
1.4.1.1 Inter-relationship of Themes

The five (5) main themes were found to be inter-related and mutually supporting. It was found that the: people, attitude and approach; provincial frameworks, structures and plans; and, existing emergency management capacity had a direct impact in the effectiveness of communications. Outcomes can, and have been, identified to drive the continuous improvement. The following describes the inter-relationship of the main themes in more detail.

- The overall attitude and approach of people and the Government of Alberta, specifically the "can do" attitude, acknowledgement that it was not "business as usual", and the extraordinary efforts of individuals and groups involved, was a noted strength.
- The efforts of individuals and groups were most effective when guided, informed and supported by established frameworks, structures and plans.
- There are extensive emergency management skills, capability and capacity throughout the Government of Alberta and the province. These skills and capabilities are not only resident within the Ministries but also throughout municipalities, non-government organizations, Federal partners and industry. The key role of the Alberta Emergency Management Agency and the Government of Alberta is to ensure that appropriate frameworks, structures and plans are in place so this capacity can be harnessed and coordinated.
- In order to successfully implement and execute the frameworks, structures and plans the required emergency management capacity must be in place. Emergency management capacity is built through: training, awareness and exercises; structures and programs to assist municipalities and First Nations with emergency management capacity; and, ensuring appropriate staffing levels and staff capacity.

- Any identified issues and challenges with respect to communications were largely symptomatic of gaps within the other themes. The effectiveness of communication increased when it was guided by a framework, structure or plan, and increased even further when people were aware of, trained in, and supported by an applicable framework, structure or plan.
- A culture of continuous improvement exists within the province. Improvement initiatives undertaken between 2011 and 2013, and ongoing improvement initiatives implemented since the 2013 floods, were found to be a foundational component that supports and enhances the other themes.

The diagram below depicts the inter-relationship of the five (5) main themes.


People. Attitude and Approach
Provincial Frameworks, Structures and Plans
Emergency Management Capacity
Outcomes
Continuous Improvement
Communication Improves

1.4.2 Overview – A Success Story for Alberta….But Still Work to Do

The response to and recovery from the 2013 floods can be summarised as a success story for Alberta. However, it is acknowledged that there are clear opportunities for improvement and additional work and investment in emergency management is required. An overview of findings is found below and in the sections to follow. Detailed observations and findings related to each theme are included in Section 3 of this report.

- Considering the size of the geographic area impacted, speed of onset and scope of damage, the response and to recovery from the 2013 floods can be viewed as a success and should be a source of pride for the Government of Alberta, impacted communities and all Albertans.
- Areas for improvement were identified and shortfalls noted; however, on balance and considering the magnitude and impact, stakeholders rated the Government of Alberta's response and recovery efforts as effective. Words used to describe what the province accomplished included "remarkable" and "unprecedented".
- Analysis and jurisdictional review has shown that Alberta is aligned with, and in some cases ahead of, global best practices for emergency response and recovery. The Alberta Emergency Management Agency is staffed with highly competent and dedicated professionals but staffing

levels are at a bare minimum and there is very little depth, in particular with senior leaders and within some ministries.

- Measurable improvements to the province's response capability were made between the Slave Lake fires in 2011 and the 2013 floods. Recovery lessons learned were also leveraged and used effectively during the 2013 floods.
- The 2013 floods challenged Alberta's emergency management system to an extent never before encountered and highlighted gaps and areas for improvement. Considerable improvement initiatives have already been completed or are in the process of being implemented. However, it is imperative that identified areas for improvement be addressed and the current improvement momentum be sustained. Stakeholder expectations throughout the province are high and improvement will be expected.
- While some projects may require significant capital funding, the majority of improvement activities will require sustained focus, funding and effort but will not involve excessively high implementation costs.

1.4.3 Summary of Key Findings by Theme

The following provides a summary of key findings under the five (5) main themes.

Summary of Key Findings by Theme
People, Attitude and Approach
General: The attitude and approach taken by the Government of Alberta, and all involved in response and recovery, was critical to success. The "can do" attitude and approach is most effective when guided by established and practiced emergency management frameworks, structures and plans.
Health Supports: The extraordinary efforts took a toll on those involved. The requirement for physical and mental health supports, and well as a formalised staff recognition program for those who were seconded to work on response or recovery, was identified.
Unity of Approach: The province's approach to response and recovery that included principle: "An Albertan is an Albertan" was a strength. This attitude set the tone and was enforced through actions during the response and recovery. Where multiple jurisdictions occur there is a requirement to clearly identify and define the roles and responsibilities of each level of government during a disaster event.
Provincial Framework, Structure and Plans
General: Extensive emergency management skills and capability exists within the Government of Alberta and throughout the province in municipalities, First Nation communities, non-government organizations, Federal partners, industry and volunteers. A key role of the Alberta Emergency Management Agency and the Government of Alberta is to ensure that the required frameworks, structures and plans are in place to harness, direct and coordinate the capabilities, and generally set the conditions for success.
Legislation and the Alberta Emergency Plan: The Emergency Management Act and supporting regulations currently in place are effective. Any gaps or shortfalls in legislative detail or direction can efficiently and effectively be addressed in the Alberta Emergency Plan.
Public Safety Governance: The Public Safety Governance framework document that was developed following the 2011 Slave Lake fires is an effective structure that should continue to be used and refined. Having it in place prior to the 2013 floods helped set the conditions for success. The manner in which it was developed, including leveraging best practices from other Canadian and American jurisdictions and extensive stakeholder consultation, can be used as a model for developing other provincial emergency management frameworks.

Summary of Key Findings by Theme
Ministerial Task Force and Flood Recovery Task Force Structures: The Ministerial Task Force and Flood Recovery Task Force structures were highly effective and should become permanent parts of the emergency management system. Any issues identified with respect to the Flood Recovery Task Force were not related to the structure but more directly linked to a general lack of awareness regarding its role and mandate, and a lack of training for Flood Recovery Task Force members. The Recovery Operations Manual under development will help in the future but it is essential that it is fully implemented, staff are identified and trained, and recovery operations are exercised.
Emergency Social Services Framework: The lack of a formalised and comprehensive emergency social services framework was one of the most significant gaps in overall response and recovery. Coordinating and delivering emergency social services in large scale disasters is inherently complex and there are numerous resources and specialists that need to be coordinated. Throughout Government of Alberta, the municipalities, and non-governmental organisations there is considerable emergency social services capability within Alberta. The absence of a provincial framework resulted in coordination and communication issues, lack of clarity regarding roles and responsibilities and challenges with delivery. Although challenges were eventually overcome through the outstanding efforts of the individuals and groups involved, there is an urgent requirement to develop and implement a provincial emergency social services framework.
Recovery and the Disaster Recovery Program: Recovery overall was assessed by stakeholders as effective. The Disaster Recovery Program component related to the rebuild and restore of public works and community infrastructure has gone well and support to small businesses was also effective. However, the Disaster Recovery Program, and its delivery model at the time, was not designed to meet the demands of the 2013 floods. The requirement for a complete redesign is well understood by the Government of Alberta and is in the process of being completed. This needs to remain a priority and be completed as quickly as possible. Demands and expectations regarding Disaster Recovery Program support to individual claimants exceeded that which the program was intended to deliver, and as a result execution struggled from the start. Processes, infrastructure and staffing were not able to meet the volume or complexity, and support for the individual claimant component of the Disaster Recovery Program was identified as the largest shortfall in the province's recovery efforts. Since the 2013 floods the Government of Alberta has committed significant time, resources and focus towards improving Disaster Recovery Program delivery and file management. Although considerable progress has been made, it has not met the needs of some stakeholders in the hardest hit communities. However, while many stakeholders interviewed were highly critical of the Disaster Recovery Program, the majority acknowledged that the program is generous. Alberta is one of the only provinces in Canada that does not have a limit on the compensation offered under the program.
Role of Elected Officials: The role of elected officials in a disaster was not clear and specific emergency management training for elected officials and Deputy Ministers is required. There is also a need to improve communication and information passage to Members of the Legislative Assembly in impacted communities.
Provincial Operations Centre Infrastructure: The current Provincial Operations Centre, and supporting incident management software system, is inadequate for a provincial level centre and a new Provincial Operations Centre is required. Issues related to incident management software have been recognised and the Alberta Emergency Management Agency is in the process of acquiring incident management software that will assist with situational awareness, information passage, coordinating efforts and resources and reporting.

Summary of Key Findings by Theme

Government of Alberta Business Continuity Program: The GoA Business Continuity Program framework is in accordance with leading practices as well as business continuity industry standards and proved to be effective during the 2013 floods. The structure with the Cross Government Coordination Team (CGCT) and ministry Consequence Management Officers (CMOs) proved to be sound, and the department plans that were activated worked well. However it is acknowledged that the 2013 floods occurred in the southern portion of the province and did not impact Edmonton and key government infrastructure in that area. A key point that the 2013 floods demonstrated was the importance of detailed and current business continuity plans at the department and agency level, and departmental/agency staff trained in plan execution.

Emergency Management Capacity

General: Emergency management capacity building at the provincial level needs to focus on specific activities that will improve internal capacity within the Government of Alberta. Additionally, a focus on training, programs and assistance at the municipal and First Nations level will enhance external emergency management capacity.

Training, Awareness and Exercises: The value of training, awareness and exercises was one of the most common points raised by stakeholders. It is a key component of capacity building throughout the province and it must remain an area of focus for the Government of Alberta and be sufficiently funded.

An additional benefit of training, awareness and exercises is the development of relationships with emergency management partners.

Capacity Building at the Municipal Level: The Alberta Emergency Management Agency Field Officer Program is a critical component in the emergency management system and provides significant value in terms of capacity building in all phases of emergency management. There was a direct correlation between a municipality's view of Government of Alberta communications, coordination and value, and the presence of a Field Officer. The Field Officer Program has been identified as a high priority for funding and growth.

A regional approach to emergency management and the use of incident management teams have proven to be effective ways to enhance emergency management capacity within municipalities. The programs and incentives the Government of Alberta has in place to foster regionalisation and incident management teams are positive steps and movement towards an integrated regional approach that will provide value and increase capacity.

The Provincial Operations Centre is managed through the Incident Command System. Many municipalities have also fully implemented this system. The value of the Incident Command System is clear and implementing, tailoring and perfecting its use is an identified priority for all levels, as it is a key enabler to capacity building as well as ensuring an effective and coordinated response.

Emergency Management in First Nations: There is a requirement to further increase emergency management capacity in First Nations. The key to building capacity is through training and by ensuring a sufficient number of specially trained Field Officers are deployed and build relationships with the First Nations communities.

Summary of Key Findings by Theme

Staffing Levels and Capacity: There will always be staffing level and capacity issues during any large scale emergency. In order to mitigate these issues, targeted hiring of individuals for key areas and building emergency management capacity and skills through the training of existing staff is required well in advance of a disaster.

AEMA staff resources in general, and those personnel from ministries that were working in the Provincial Operations Centre were stretched to the breaking point. Ministries should have three to four trained Consequence Management Officers and, considering the vital role training plays in capacity building and support during disasters, it is essential that AEMA has the required staffing to plan, coordinate and implement training programs.

Communications

Communications General Finding: Where frameworks, plans and procedures were in place, and people were trained in their use, communication and information passage was quite effective. In situations where these underpinning elements were not in place there were communication challenges.

Communications with Municipalities and First Nations during Response: The volume of information and the pace of change created communications challenges. Communications within the Government of Alberta and to municipalities and First Nations is highly dependent on the ability to develop situational awareness, manage information and then communicate through reports and other products. While the Provincial Operations Centre performed well in this regard, the facility was not equipped with an effective incident manage software system and as such communications proved difficult. This issue should largely be addressed with the implementation of a state of the art incident management software system.

Communications with the Public: Communications from the Government of Alberta to the public flowed through two (2) primary channels. One channel was from the Public Affairs Bureau, who received updated information and agreed upon common messaging with the Provincial Operations Centre.

The Public Affairs Bureau staff who manage crisis communication were more effective and of greater value when there was sufficient staffing within the Provincial Operations Centre and they were closely integrated in Provincial Operations Centre operations. In addition, Public Affairs Bureau staff would benefit from specific crisis communications training.

The second communication channel to the public was through elected officials. This communication channel improved as the disaster progressed, as the elected officials were able to align their messaging with capacity and accurate information.

It is important to note that the provincial approach was to let municipalities manage communication with their constituents. This approach was lauded by municipalities as an effective strategy for information dissemination.

Continuous Improvement

General: As demonstrated by the initiatives undertaken since 2011, a culture of continuous improvement exists within the province. This culture has driven many improvement initiatives to the emergency management system since the 2013 floods and needs to continue.

Improvements 2011 to 2013: Measurable improvements to the province's response capability were made between the Slave Lake fires in 2011 and the 2013 floods. Recovery lessons learned were also leveraged and used effectively during the 2013 floods. These improvements added significant structure and process to the response and recovery efforts to the 2013 floods.

Summary of Key Findings by Theme

Ongoing Improvement Initiatives: There are many improvement initiatives underway. At the time of stakeholder consultation, the province was tracking 176 post-flood initiatives. Since the 2013 floods the province has identified and actioned a number of lessons learned and implemented key improvements that should be seen through to completion.

1.4.4 Summary of Stakeholder Observations

During stakeholder consultation, stakeholders were given the opportunity to rate how they felt the province did with respect to each of the seven (7) review objectives. The interviewees were asked to rate the province on the following scale:

- Highly effective
- Effective
- Ineffective
- Highly ineffective

It is important to note that there was no neutral rating option, and that not all stakeholders were able to provide input relating to each of the objectives, depending on their specific experiences and circumstances during the response and recovery efforts. Where sufficient data was collected, the average response is reported in the table below.

		Stakeholder Groups					
		Government of Alberta Ministries	AEMA	Municipalities	First Nations Communities	External Agencies	Overall Rating for Objective
Review Objective	Interagency Emergency Response and Coordination	Effective	Effective	Effective	Effective	Effective	Effective
	Public Alerting, Community Evacuation and Communications	Effective	Effective	Effective	Effective	N/A	Effective
	Evacuee Support and Interim Accommodation	Effective	Effective	N/A	Effective	N/A	Effective
	Transition from Response to Recovery	Effective	Highly Effective	Effective	Ineffective	N/A	Effective
	Health and Safety	Effective	N/A	Effective	Ineffective	N/A	Effective

Provincial State of Emergency	Effective	Highly Effective	N/A	N/A	N/A	Effective
Recovery Activities	Effective	Highly Effective	Effective	Effective	N/A	Effective
Overall Rating by Stakeholder Group	Effective	Highly Effective	Effective	Effective	Effective	Effective

1.5 Summary of Recommendations

The tables below provide a summary of recommendations and the benefits and intended outcomes of each. A detailed description of recommendations is found in Section 4 of this report.

<table>
<tr><th colspan="3">Theme: People, Attitude and Approach</th></tr>
<tr><th>#</th><th>Recommendation</th><th>Benefits / Intended Outcomes</th></tr>
<tr><td>Theme Recommendation</td><td colspan="2">The demonstrated "can do" attitude, acknowledgement that a disaster is not business as usual and all-inclusive approach to assisting those affected should remain the province's foundational approach for future response and recovery efforts. The "can do" attitude and approach should be guided and channeled by established and practiced emergency management frameworks, structures and plans.</td></tr>
<tr><td>1</td><td>Develop an Emergency Management Staff Wellness Program.
While the overall attitude and approach taken, and the exceptional work of individuals was a differentiator for the province, the volume of work, pace and demands took a toll on people. Consideration should be given to the development of a program and basic procedures to assist in caring for Government of Alberta staff physical and mental health, both during and after the disaster.</td><td>• Demonstrates care for people and appreciation of their efforts
• Demonstrates the importance of people and emergency management in the Government of Alberta</td></tr>
</table>

<table>
<tr><th colspan="3">Theme: Provincial Framework, Structure and Plans</th></tr>
<tr><th>#</th><th>Recommendation</th><th>Benefits / Intended Outcomes</th></tr>
<tr><td>Theme Recommendation</td><td colspan="2">In order to effectively harness and coordinate the emergency management capacity and capabilities of Ministries, municipalities and other stakeholders the province should ensure that appropriate provincial-level frameworks, structures and plans are in place for all aspects of emergency management.</td></tr>
</table>

Theme: Provincial Framework, Structure and Plans		
#	**Recommendation**	**Benefits / Intended Outcomes**
2	**Complete the update to the Alberta Emergency Plan.** The Alberta Emergency Plan should be considered as a key document for ensuring a unified and coordinated approach to emergency management throughout the province. The document should clearly articulate the requirements outlined in the Government Emergency Management Regulation, details from Public Safety Governance and specifics such as direction to municipalities and ministries.	• Provides a common and unified approach for emergency management in Alberta • Addresses shortfalls in legislation noted by some stakeholders • Facilitates regionalization of emergency management • Articulates roles and responsibilities for all involved
3	**Maintain existing frameworks, structures and plans and implement identified improvements.** The key frameworks, structures and plans that were in place prior to the 2013 floods, or developed during recovery, proved to be effective, and should be adjusted as required and fully imbedded into the emergency management system.	• Reinforces the value of Public Safety Governance and the success of the Ministerial Task Force and Flood Recovery Task Force structures • Ensures that lessons learned from the 2013 floods are implemented and sustained
4	**Develop and implement a Provincial Emergency Social Services framework.** This framework should be completed as a priority. The process used to develop the Public Safety Governance framework document is a sound model to follow. Working collaboratively with municipalities, non-government organizations and applicable Government of Alberta Ministries to develop the framework must include clear delineation of roles and responsibilities, communications and coordination processes and details to ensure a unified approach.	• Provides a unified approach to the delivery of Emergency Social Services • Optimises the available emergency social services resources in Alberta; significant capacity exists • Improves communication between all stakeholders • Ensures clarity of roles and responsibilities • Provides details for specific Emergency Social Services requirements

Theme: Provincial Framework, Structure and Plans		
#	Recommendation	Benefits / Intended Outcomes
5	**Complete the redesign and implement changes to the Disaster Recovery Program.** Considerable effort and focus has gone into managing and improving the Disaster Recovery Program and progress has been made. The Government of Alberta must consolidate and simplify the application and tracking process for all types of funding provided and leverage the lessons learned from the 2013 floods. Specific attention should be paid to streamlining the overall process, continuing the awareness campaign and improvements to the processing of individual claimant files.	• Positions the province to meet high stakeholder expectations • Addresses one of the key, and most publicly noted, opportunities for improvement • Ensures prudent spending of public funds
6	**Develop a new, state of the art Provincial Operations Center facility.** Effective communication, coordination and synchronisation is heavily dependent on the physical size and layout of the Provincial Operations Center, and supporting incident management software. The new Provincial Operations Centre must be purpose built.	• Enables the province to better meet demands and fulfill their role in the emergency management system • Improves communication, coordination and information management • Facilitates interagency cooperation and a whole of government approach
7	**Continue to refine and improve Government of Alberta Business Continuity Plans.** The 2013 floods did create a business continuity event and the existing plans and program were effective. Ongoing effort should focus on plan and program refinement, enhancing business continuity plans at the department and agency level and exercising the plans.	• Ensures essential government services and continue to be delivered following a disaster or disruption • Enhances reputation and meeting the expectations of stakeholders

Theme: Emergency Management Capacity		
#	Recommendation	Benefits / Intended Outcomes
Theme Recommendation	The province must continue to focus on programs and activities that build emergency management capacity within the Government of Alberta, as well as those which facilitate, assist and set the conditions for capacity building in municipalities and First Nations.	

Theme: Emergency Management Capacity

#	Recommendation	Benefits / Intended Outcomes
8	**Ensure training, awareness and exercises are a top priority and continue to develop, enhance and fund these activities.** Training, awareness and exercises, both internal to the Government of Alberta and within municipalities and First Nations, are critical components of building emergency management capacity. It is through continuous training and practice on specific procedures, increasing overall awareness, and holding activities to collaborate with partners, and build relationships that emergency management capacity is increased. A comprehensive and focused training, awareness and exercise program is critical and the program should include different delivery methods and continue to evolve to meet the needs of the different audiences. A specific program, to include an emergency management guide, awareness training, and exercise participation for elected officials and Deputy Ministers should be developed.	• Contributes to capacity building both internally and in municipalities and First Nations • Increases capability and skills to execute emergency management processes • Facilitates relationship development with emergency management partners
9	**Continue to enhance and develop the Field Officer Program.** Field Officers are a key component of the emergency management system. Their value and contribution to capacity building is through planning, training, ongoing advice, and general assistance prior to an emergency, and obtaining resources and facilitating communications during response. It is recommended that the Field Officer program remain a priority. This program should be adequately funded and individuals selected to be Field Officers must receive the requisite training and rotation should be is minimized as much as possible.	• Contributes to capacity building in municipalities and First Nations • Improves communication between municipalities and the Government of Alberta • Helps to ensure a common approach to emergency management
10	**Support and facilitate regionalisation of emergency management in Alberta.** The concept of regionalisation for emergency management has proven to be highly effective and increases capacity at the municipal level. The Government of Alberta should continue to support and facilitate the regionalisation of emergency management.	• Contributes to capacity building in municipalities and First Nations • Optimizes the use of regional emergency management resources • Facilitates relationship development with emergency management partners

Theme: Emergency Management Capacity		
#	Recommendation	Benefits / Intended Outcomes
11	**Support and focus emergency management capacity building in First Nations.** Facilitating capacity building in First Nations is not substantially different than what is required in all municipalities. It is underpinned by Field Office participation, assistance with plan development training, access to funding and general advice and guidance. It is recommended that the First Nations Field Officer program, and building emergency management capacity in First Nations, remain a priority.	• Helps address the unique challenges present in First Nations communities • Improves communication between First Nations and the Government of Alberta
12	**Address staffing and staff capacity challenges through training and select hiring for key positions.** Staffing levels and capacity will always be an issue during any large scale emergencies. The challenge is best addressed through targeted pre-disaster hiring in key areas, such as Field Officers and Disaster Recovery Program management, and by building emergency management capacity and skills through the training of existing staff.	• Helps ensure that sufficient, trained resources are available during emergency situations
13	**Pre-qualify vendors and create a standing offer/vendor of record list for contracted emergency management response and recovery services.** Using existing procurement processes, pre-qualify vendors and create a standing offer/vendor of record list for emergency management response and recovery services	• Helps to expedite the contracting process • Assist with contract management

Theme: Communications		
#	Recommendation	Benefits / Intended Outcomes
Theme Recommendation	To improve communications it is recommended that focus be placed on items in the other themes: development of the appropriate frameworks, plans and procedures, and ensuring all involved are trained and aware of the procedures.	

Theme: Communications		
#	**Recommendation**	**Benefits / Intended Outcomes**
14	**Improve communications and information passage within the Government of Alberta, to municipalities, and to the public.** Gaps in communications and information sharing was an issue raised by many stakeholders. Although it was understandable given the circumstances, it was a noted area for improvement. In addition to the overarching theme recommendation above it is recommended that, implementation an effective emergency management software system in the Provincial Operations Center, crisis communications specialist training Public Affairs Bureau staff and designating a single point of contact or liaison to field questions from Members of the Legislative Assembly should be priorities.	• Helps to address issues communicating within the Government of Alberta • Helps to address issues communicating to municipalities and First Nations assists with the sharing of situational awareness • Assists with communication and clear and consistent messaging to the public

Theme: Continuous Improvement		
#	**Recommendation**	**Benefits / Intended Outcomes**
Theme Recommendation	The province should sustain the current improvement momentum and focus on gaps that were known to exist prior to the 2013 flood and had not been addressed, and ensuring follow through on improvement initiatives currently underway.	
15	**Complete work on previously identified areas for improvement.** Significant improvement were made between the 2011 Slave Lake fires and the 2013 floods. However, some key opportunities for improvement had not been completed and these should be a priority. Focus should be on redesign of the Disaster Recovery Program, completion and roll out of the updated Alberta Emergency Plan and development and implementation of the Emergency Social Supports framework.	• Ensures high priority opportunities for improvement are completed • Helps ensure that stakeholder expectations are met

#	Recommendation	Benefits / Intended Outcomes
	Theme: Continuous Improvement	
16	**Document procedures that were developed and effectively used during the 2013 floods and action items identified in the numerous after action reviews completed to date.** A number of effective procedures were developed during response and recovery and it is essential that these be fully documented and imbedded in the emergency management system. In addition, a large number of after action reviews were completed by the various ministries and the Flood Recovery Task Force and good recommendations were made. The Government of Alberta must ensure that these actions are followed through to completion.	• Capitalize on the learning opportunities presented by and experienced during the 2013 floods

2 Introduction

2.1 Background

For the province of Alberta, the months of June and July 2013 will be forever associated with the floods that surged across the province's southern region. As a result of the unforeseen and rapid onset of these floods, 30 States of Local Emergency were declared by local authorities and one Provincial State of Emergency was declared for the Town of High River. The 2013 Southern Alberta floods were the worst flooding event in the province's history, and one of the largest natural disasters in Canadian history. The speed of onset and sheer size and scope of the flooding tested the province's response and recovery capabilities to a degree never before encountered in Alberta and rarely seen globally. This seven (7) day severe weather event claimed the lives of five people[1] Two were swept away as they tried to escape from High River, one woman was caught off guard while camping near Longview and a Calgary senior drowned in her main floor condo. During the flooding disaster, an Okotoks-area man also lost his life in an ATV accident while trying to help his neighbour fend off rising floodwaters.

The 2013 floods cut off dozens of Alberta's communities and necessitated the largest evacuation in Canada in more than 60 years. An estimated 100,000[2] Albertans were instructed to evacuate their homes, and approximately 14,500 homes and 1,100 small businesses were impacted. In select areas of the province, entire neighborhoods were under water for weeks.

In the face of this catastrophic event response was swift and coordinated. The Provincial Operations Centre (POC), was activated at its highest level, Level 4, for 24 days and over 2,200 members of the Canadian forces and numerous other agencies were deployed throughout the province to help with the response. The Flood Recovery Task Force (FRTF), led by Municipal Affairs and with key representation from across the provincial government and a direct link to the provincial Treasury Board, was quickly formed and managed recovery efforts. Showcasing their signature determination and independence, Albertans responded by pulling together to help their neighbors and fellow citizens through offers of food, temporary shelter, clothing and other supplies.

It is a standard practice of the Alberta Emergency Management Agency (AEMA) to conduct a post-event review for any incident that requires activation of the POC. Recognizing that the 2013 floods provided a unique opportunity to complete a comprehensive review of their current response and recovery capabilities, the Government of Alberta (GoA) commissioned this independent review.

2.2 Aim, Scope and Objectives

2.2.1 Aim

The overarching aim of this independent report is to review and assess the efficiency and effectiveness of the province's emergency response and recovery processes, procedures, capabilities and framework in the response to, and recovery from, the 2013 Southern Alberta floods. The intent and desired end state is to provide the GoA with a comprehensive report, including evidence-based recommendations that can be used as a strategic and operational guide for the future.

2.2.2 Scope and Objectives

The province has completed a number of ministry or agency post flood reviews since the 2013 disaster and considerable improvements have already been adopted. The amount of work that has been done by provincial and local officials in such a short time demonstrates the commitment at all levels of government to strengthening the province's emergency management system. As such, in addition to a review and analysis of the specific objective areas identified by the GoA, and outlined below, this report is designed to be the capstone review, taking into consideration other post-event reviews and improvements actioned to date.

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[1] "Alberta Floods: The 5 People We Lost." CBC Calgary. June 20, 2014. Retrieved from: http://www.cbc.ca/calgary/features/albertaflood2013/alberta-flood-deaths/

[2] Hale, Twyla. (2014). *Southern Alberta Flood Disaster Recovery* Program [Powerpoint slides]. Retrieved from http://www.aema.alberta.ca/alberta-emergency-management-agency-stakeholder-summits.cfm

The scope of this review is focused on the provincial government's response and recovery efforts in seven (7) objective areas:

1. **Interagency Response & Coordination:** Review the goals, timelines, and coordination of response-related activities of provincial disaster and emergency response departments and agencies and their coordination and interaction with other response agencies.
2. **Public Alerting, Community Evacuation & Communication:** Review the effectiveness and timeliness of public alerting and the province's support for community evacuations.
3. **Evacuee Support & Interim Accommodation:** Review the province's emergency accommodation response including its coordination with communities and social service organizations.
4. **Transition from Response to Recovery:** Review the procedures for, and effectiveness of, the province's shift from response operations to the initiation and mobilization of its recovery operations.
5. **Health & Safety:** Review the province's provision of emergency medical and social supports to impacted communities.
6. **Provincial State of Emergency:** Review the processes, procedures and implementation of the Provincial State of Emergency in High River.
7. **Recovery Activities:** Review the effectiveness and efficiency of the province in addressing the immediate and long-term, recovery needs of the people and communities impacted.

These main objective areas provide a sound framework for the overall review; however, the observations, findings and recommendations resulting from the review have been presented in this report under five overarching and interrelated themes.

The review period for this report encompasses June 19, 2013 to December 31, 2014. It is important to note that any projects or improvements made after December 31, 2014 are outside of the scope of this report. In addition, while this report includes a review of recovery activities, it does not involve a detailed analysis of the Disaster Recovery Program (DRP) or any specific programs related to flood recovery or flood mitigation efforts. The significance of these programs has been clearly recognized by the province and as such the programs are being addressed by separate projects and initiatives.

2.3 Approach

2.3.1 Guiding Principles

In order to achieve the desired aim and end state, the following principles were used to guide the overall approach to the review:

- Effective planning and ongoing coordination with the Government of Alberta project leads
- Comprehensive stakeholder consultation, information gathering and documentation review
- Focused gathering of relevant benchmarking and comparison information
- Analytic and evidenced-based reporting with clear and actionable recommendations

The approach undertaken to produce this report was structured into the three distinct, but linked, phases:

1. Project planning
2. Data collection and analysis
3. Recommendations and Reporting

2.3.2 Project Planning

During the Project Planning phase, the exact scope of the review, as well as the seven (7) objective areas that would frame the data collection and analysis were confirmed. A key outcome of this phase was the development of an extensive consultation process designed to gather accurate and sufficient data. A high level of importance was placed on collecting data that would provide a balanced and comprehensive overall perspective of the 2013 floods, support observations and findings, and contribute to valuable and practical recommendations going forward.

Working with the GoA, six (6) stakeholder groups were identified for participation in the consultations:

Group #	Group Description
Group 1:	AEMA and task forces involved in response and recovery
Group 2:	External stakeholders and agencies involved in response and recovery
Group 3a:	Government of Alberta Ministries involved in response and recovery
Group 3b:	Selected Ministers, Associate Ministers, Deputy Ministers and Members of the Legislative Assembly (MLA) from impacted communities
Group 4:	Municipalities impacted by flooding
Group 5:	First Nations impacted by flooding

Once these stakeholder groups were confirmed, the remainder of the project planning phase was dedicated to detailed logistical planning to ensure all stakeholder groups were provided with the opportunity to participate in the data collection phase and provide input to the review.

2.3.1 Data Collection and Analysis

The data collection and analysis phase consisted of three components:

- Documentation review
- Stakeholder consultation
- Jurisdictional review

A brief description of each component is outlined below.

2.3.1.1 Documentation Review

Multiple documents related to the province's response and recovery efforts were reviewed in order to develop a clear understanding of the details surrounding the Government of Alberta's response to, and recovery from, the 2013 floods. These documents were reviewed based on the seven (7) objective areas. The information gathered was used to develop interview guides for the stakeholder engagement and consultation sessions.

Prior to the commencement of this review in July 2014, the GoA, AEMA and other external agencies had already completed a number of post-event reviews and recommended a number of opportunities for improvement. Many of these improvements were implemented prior to December 31, 2014; therefore, the province's response and recovery capabilities evolved and improved throughout the course of this review. Information and documentation on improvements and new initiatives was reviewed as it became available to ensure that the final recommendations indicated in this report reflect the current state as of December 31, 2014.

2.3.1.2 Stakeholder Engagement & Consultation

Considerable effort was made to ensure that a broad cross section of stakeholders provided input to the review. Accordingly, the interview guides that were developed for each stakeholder group during the document review were utilized to interview members from each of the stakeholder groups.

In addition to providing qualitative observations relating to the province's response to and recovery from the floods, stakeholders were given the opportunity to rate the province on each of the review objectives. These ratings have been used to provide a quantitative assessment of the province's performance. It is important to note that while the majority of stakeholders interviewed provided ratings, some chose not to provide a rating of one or more objective due to their specific role in the response or recovery efforts.

In order to achieve the principle of comprehensive stakeholder consultation and information gathering, over 150 stakeholders participated in interviews, including:

- AEMA staff members
- External stakeholders and staff members from agencies involved in the response and recovery
- Staff members from various ministries involved in the response and recovery
- Ministers
- Associate Ministers
- Deputy Ministers
- Members of the Legislative Assembly
- Staff members from municipalities impacted by flooding
- Staff members from First Nations impacted by flooding
- External stakeholders from international groups and agencies with specific experience responding to, and recovering from, similar events internationally

A complete list of participating stakeholder entities can be found in Appendix A – Participants in Stakeholder Consultation. In addition, experts external to the province from agencies and organizations that have been involved in the response and recovery of similar events were interviewed. These experts include a former leader within the Joint Task Force Katrina, the Director of Emergency Management for New York City, emergency management professionals from New South Wales, director-level staff from the United States Federal Emergency Management Agency, members of the Louisiana Police Department and experienced career journalists specializing in coverage of major North American disasters.

2.3.1.3 Jurisdictional Review

In addition to the data gathered during the documentation review and stakeholder consultation components, a jurisdictional review was completed involving two activities. The first activity was an analysis of the response and recovery efforts of large-scale disaster events with a similar scope, similar speed of onset and similar supporting emergency response and recovery structures in place. These events were chosen from an account of previous disasters that occurred domestically in Alberta and Canada, as well as internationally in the United States, Australia, New Zealand and Chile. The second activity was a comparison of disaster recovery programs and emergency management legislation within all Canadian provinces and territories. The objective of both activities was to compare the 2013 flood response and recovery efforts and programs against those of other similar disasters.

2.3.2 Recommendations and Reporting

Based on the information gathered through stakeholder consultation, as well as the research and analysis completed in the data collection and analysis phase, observations, findings and recommendations have been identified and documented within this report. The recommendations have been developed as a result of all data collection and analysis components, including observations and findings from stakeholder engagement, as well as lessons learned, best practices and industry-leading standards gathered during the jurisdictional review.

Additionally, this report incorporates the results of the province's improvements and new initiatives up to December 31, 2014. In this way, this report can be viewed a capstone review document that covers both work that has already been completed by the province, as well as additional recommendations for improvement and the maintenance of the existing improvement momentum.

2.4 Context – Understanding the 2013 Southern Alberta Floods

2.4.1 Introduction

While no portion of this report is intended to be a detailed chronology of all events or a narrative of the disaster, in order to fairly and accurately assess the province's response and recovery activities it is important to understand the overall context and the size, scope, and speed of onset of the flooding. The findings and recommendations in this report have taken into consideration the overall context of the 2013 floods, including the timeline, historical context, and comparison to other significant events.

2.4.2 Timeline of Events

Date (2013)	Event
June 18 **2000 hrs**	State of Local Emergency is declared by City of Red Deer[3]
June 19 **2130 hrs**	High Stream Advisory Update is issued for region on Alberta Emergency Alert system indicating "no significant flooding anticipated"[4]
June 20 **0242 hrs**	First Information Alert* is issued by Flood Forecast Centre (AESRD) indicating "Information Alert – Flood Watch"[5]
June 20 **0426 hrs**	First Information Alert* is issued by a local authority (MD of Bighorn) indicating "Information Alert – Overland Flood"[6]
June 20 **0500 hrs**	Provincial Operations Center (POC) is elevated to Level 2[7]
June 20 **0954 hrs**	First Critical Alert* is issued by local authority (MD of Foothills) indicating "Critical Alert – Flash Flood"[8]
June 20	Provincial Operations Centre (POC) is elevated to Level 4, remains elevated for 24 days[9]

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[3] "June 2013: News Archive." The City of Red Deer (2014). Retrieved from: http://www.reddeer.ca/whats-happening/news-room/news-archive/2013-news-archive/june-2013-news-archive/

[4] Galea, Dave. (2014). *Overview of 2013 Southern Alberta Floods*. [Powerpoint slides].

[5] "Information Alert: Flood Watch." (June 20, 2013) Alberta Emergency Alert. Retrieved from: http://www.emergencyalert.alberta.ca/alerts/2013/06/1704.html

[6] "Information Alert: Flood Watch." (June 20, 2013) Alberta Emergency Alert. Retrieved from: http://www.emergencyalert.alberta.ca/alerts/2013/06/1706.html

[7] Stakeholder consultation interview

[8] "Information Alert: Flood Watch." (June 20, 2013) Alberta Emergency Alert. Retrieved from: http://www.emergencyalert.alberta.ca/alerts/2013/06/1737.html

[9] Galea, Dave. (2014). *Overview of 2013 Southern Alberta Floods*. [Powerpoint slides].

Date (2013)	Event
June 20 **1209 hrs**	State of Local Emergency is declared by City of Lethbridge[10]
June 20 **1400 hrs**	State of Local Emergency is declared by City of Medicine Hat[11]
June 20 **Various times**	29 Original Alerts are issued on Alberta Emergency Alert system (see Alerts* listed below) • 11 critical (threat to life and safety) • 18 information (informing public of risks and action to take)
June 20 **2100 hrs**	Request for Assistance from the Canadian Forces is initiated[12]
June 21	Chief Assistant Deputy Minister for the Southern Alberta Flood Recovery Task Force is named and begins assessment of situation[13]
June 21	Canadian Forces arrive in southern Alberta[14]
June 22	350 members of the Princess Patricia's Canadian Light Infantry from Edmonton are deployed to the flood zone in High River[15]
June 23	Chief Assistant Deputy Minister for the Southern Alberta Flood Recovery Task Force completes assessment and development of framework for recovery[16]
June 24	Chief Assistant Deputy Minister for the Southern Alberta Flood Recovery Task Force presents assessment and framework to Cabinet and gains consensus[17]
June 24	Rapid Assessment Structural Safety Teams (RASST) are assembled and available[18]
June 24	Government of Alberta approves $1 billion in Disaster Recovery Program funding[19]
June 24	65,000 Calgary residents are allowed back into their homes[20]
June 26	Trans-Canada Highway re-opens in Banff National Park[21]

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[10] "City declares local state of emergency." University of Lethbridge (June 20, 2013). Retrieved from: http://www.uleth.ca/unews/article/city-declares-local-state-emergency#.U_9nsbEjWVk

[11] "News Archive." City of Medicine Hat (2013) Retrieved from: http://www.city.medicine-hat.ab.ca/index.aspx?page=1448

[12] Stakeholder consultation interview

[13] Stakeholder consultation interview

[14] Stakeholder consultation interview

[15] "In flood ravaged High River, Canadian soliders find something resembling a war zone." National Post (June 22, 2013). Retrieved from: http://news.nationalpost.com/2013/06/22/in-flood-ravaged-high-river-canadian-soldiers-find-something-resembling-a-war-zone/

[16] Stakeholder consultation interview

[17] Stakeholder consultation interview

[18] "Government continues to respond to flooding emergency." Alberta Emergency Management Agency (June 24, 2013). Retrieved from: http://alberta.ca/release.cfm?xID=3441176BBE788-0507-D40B-BD0AE575D423A339

[19] "Alberta government approves $1 billion in emergency funding for flood recovery." Global News (June 24, 2013). Retrieved from: http://globalnews.ca/news/668198/alberta-government-approves-1-billion-in-emergency-funding-for-flood-recovery/

[20] "Alberta Emergency Management Agency briefing on flooding." Global News (June 24, 2013). Retrieved from: http://globalnews.ca/news/667142/watch-live-alberta-emergency-management-agency-briefing-on-flooding/

[21] "Trans Canada Highway re-opened in Banff National Park." Global News (June 26, 2013)> Retrieved from: http://globalnews.ca/news/658584/flooding-washes-out-trans-canada-highway-banff-canmore-declare-states-of-emergencies/

Date (2013)	Event
June 28	Provincial State of Emergency is issued for Town of High River[22]
July 1	Flood Recovery Task Force commences recovery operations[23]
July 13	Information Alert is issued by Town of High River indicating "Provincial State of Emergency has expired, Town of High River remains under local state of emergency"[24]
Sept 30 (2014)	Flood Recovery Task Force is disbanded

2.4.3 Historical Context

Floods are a common occurrence within Canada, and cost Canadians hundreds of millions of dollars every year. The Canadian Disaster Database has documented 241 incidences of flooding since 1900. Many of these floods have made headlines across the country and are easily recalled by Canadians due to their scope, magnitude and impacts. The 1997 and 2009 Red River floods 1996 Saguenay River flood, the 2011 Assiniboine River flood, and the 2012 St. John River flood are just a few of the large scale floods that have impacted Canadians in the past 20 years. In certain parts of Canada flooding occurs as often as annually, and many Albertans had experienced flooding events prior to the 2013 floods.

In 2013, records were set for the volume of water reached in many Southern Alberta rivers. The Bow River at Calgary recorded an estimated peak flow of 1,740 m^3/s; during a previous heavy rainfall and high water event in 2005 a peak flow of 791 m^3/s was recorded. During the 2005 floods, the Oldman River at Lethbridge recorded an estimated peak flow of 4,670 m^3/s. In comparison, a peak flow of 2,670 m^3/s was recorded in 2013 for this river, but its overall record was shattered through a recorded peak flow of the South Saskatchewan River at Medicine Hat at 5,590 m^3/s[25]. In 2004, a major flood in Edmonton resulted from three major storms within the period of July 3 to 11, totalling 85.8 mm[26]. The 2005 Southern Alberta flood affected 15 communities in the area, including Red Deer, Calgary, and a number of First Nation communities. In this instance, Calgary experienced over 247.6 mm of rain, and surrounding affected areas reported almost 400 mm of rain[27]. Prior to the 2013 floods, the most recent large scale disaster in Alberta was the 2011 Slave Lake fire. As will be highlighted in the Section 3, AEMA and the province implemented improvements as a result of lessons learned from the 2011 Slave Lake fire that were key to the province's ability to respond and recover in 2013.

Preceding the 2013 floods, Southern Alberta experienced a long winter with a snowfall period that ran from early October to April. In the spring of 2013, the snowmelt coupled with large amounts of rain in early May meant that by June 19, the land across the southern portion of the province was already heavily saturated, and streams and rivers were elevated. As a result, there was very little capacity for the ground to absorb the copious amounts of torrential rain that fell for the next three days.

Water from this massive rainfall flowed east through the province's river valleys, causing the largest riverine flood damage ever within Canada. The flooding cause 30 municipalities to declare States of Local Emergency, and Alberta's first ever Provincial State of Emergency was declared in High River, where 59% of the Town's residents and 70% of the Town's buildings were affected by flooding caused by rainfall and riverine flooding from the Highwood River. High River was placed under a mandatory evacuation and 13,000 residents were forced to leave the community[28] due to water flowing through the town reported by Environment Canada as "faster than [the rate] over Niagara Falls and submerging over half the town."

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[22] Galea, Dave. (2014). *Overview of 2013 Southern Alberta Floods*. [Powerpoint slides].
[23] Stakeholder consultation interview
[24] "Information Alert- Flash Flood." Alberta Emergency Alert (July 13, 2014). Retrieved from: http://www.emergencyalert.alberta.ca/alerts/2013/07/1972.html
[25] "Estimated Peak River Flows." (2014). Alberta Provincial Government. Retrieved from: http://alberta.ca/estimated-peak-river-flows.cfm
[26] Edmonton Weather Statistics. (2013). Retrieved from: http://edmonton.weatherstats.ca/
[27] "Canada's Top Ten Weather Stories for 2013." Environment Canada. (2014). Retrieved from: http://www.ec.gc.ca/meteo-weather/default.asp

Within a period of 36 hours beginning at approximately 8:00 am on June 19, various water stations across Southern Alberta recorded rainfall between 105 mm at the Ghost Ranger station, and 281 mm at Burns Creek[29]. In comparison, the Saguenay Region flood of 1996 resulted from 150 mm of rainfall within 36 hours. In 1954, 285 mm of rainfall was recorded over a period of 48 hours during Hurricane Hazel, which caused substantial and unanticipated damaged across southern Ontario.

During the 36 hour period beginning June 19, the City of Calgary received 75 mm of rain[30]. The rain quickly overwhelmed the City's storm water and sanitary sewer systems and entered small businesses and homes through the backups of municipal sewers[31].

Comparative data for a sample of Canada's largest floods is outlined in the following table. The data included shows similarities between historical flooding events and the 2013 Southern Alberta floods; however, it is important to also consider that the speed of onset and size of the impacted area was unlike anything ever seen in the province. The 2013 floods will be remembered not only for the immediate impacts on the province, but also for the scope and complexity of recovery for the Province of Alberta.

2.4.4 Comparison between 2013 Floods and Other Large Floods in Canadian History

Flood Description	Year	Number of Deaths	Number of Evacuees	Impacts	Estimated Total Costs
Southern Alberta Floods, affecting 30 municipalities across southern Alberta	2013	5	100,000	• Alberta's first ever Provincial State of Emergency declared • 30 local states of emergencies declared • Mudslides occurred throughout the province • 14,500 homes damaged • 2,200 members of the Canadian Forces deployed to assist with response efforts • 985 kilometres of road damaged	$6 billion

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[28] Eckley, Mark and Carly Benson. (2014). *Emergency planning: Lessons from High River's 2013 flood.* [Powerpoint slides]. Retrieved from http://www.aema.alberta.ca/alberta-emergency-management-agency-stakeholder-summits.cfm

[29] Stakeholder consultation interview

[30] Calgary Weather Statistics. (2013). Retrieved from: http://calgary.weatherstats.ca/

[31] Kovacs, Paul and Dan Sandink. (2013). *Best practices for reducing the risk of future damages to homes from riverine and urban flooding.* Retrieved from: http://www.iclr.org/images/Alberta_flood_risk_2013_PDF.pdf

Flood Description	Year	Number of Deaths	Number of Evacuees	Impacts	Estimated Total Costs
Saint John River, affecting the province of New Brunswick the entire length of the river [32]	2012	0	500	• State of Emergency declared for the Perth Andover region • Over 1600 properties damaged	$50 million[33]
Assiniboine River[34], affecting the provinces of Manitoba and Saskatchewan	2011	0	7,100 (Manitoba) 4,800 (Saskatchewan)[35]	• In Manitoba, 650 provincial and municipal roads were damaged, as well as nearly 600 bridges[36] • Local states of emergency declared in 70 communities in Manitoba • 1,800 members of the Canadian Forces deployed to assist with response efforts	$1 billion[37]
Red River[38], affecting the province of Manitoba along the entire length of the river	2009	0	2,800	• Overall, the impacts of this flood were significantly decreased due to mitigation projects completed after the 1997 Red River Flood • 250 homes damaged	$40 million (DFA claims only)

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[32] "Flooding causes state of emergency in N.B Community." CBC (2012). Retrieved from: http://www.cbc.ca/news/canada/new-brunswick/flooding-causes-state-of-emergency-in-n-b-community-1.1196731

[33] "Canada's Top Ten Weather Stories for 2008." Environment Canada. (2013). Retrieved from: http://www.ec.gc.ca/meteo-weather/default.asp

[34] "Canadian Disaster Database." Public Safety Canada (2013). Retrieved from: http://cdd.publicsafety.gc.ca/

[35] "Canada's Top Ten Weather Stories for 2011." Environment Canada. (2013). Retrieved from: http://www.ec.gc.ca/meteo-weather/default.asp

[36] "Manitoba 2011 flood review task force report." (2013). Government of Manitoba. Retrieved from: http://www.gov.mb.ca/asset_library/en/2011flood/flood_review_task_force_report.pdf

[37] "Canada's Top Ten Weather Stories for 2011." Environment Canada. (2013). Retrieved from: http://www.ec.gc.ca/meteo-weather/default.asp

[38] "Manitoba 2009 spring flood report." (2009). Government of Manitoba. Retrieved from: http://www.gov.mb.ca/waterstewardship/reports/floods/spring_flood_2009.pdf

Flood Description	Year	Number of Deaths	Number of Evacuees	Impacts	Estimated Total Costs
Southern Alberta, affecting the province of Alberta including Calgary, Red Deer and multiple First Nation Communities	2005	4[39]	2,000 in Calgary	• 14 municipalities declared states of emergency	$400 million[40]
Red River[41], affecting the province of Manitoba	1997	0	28,000	• 1000 homes damaged	$450 million
Saguenay River[42], affect the Saguenay-Lac-Saint-John region including Jonquiere, Chicoutimi and La Baie	1996	8	12,000	• Mudslides occurred in the affected area • 1,230 homes were damaged • 488 homes destroyed	$700 million- $1 billion
Hurricane Hazel[43], affecting the southern portion of the province of Ontario, southern region and Toronto	1954	81	Unknown	• 4000 families were left homeless	$100 million (approx. $1 billion today)
Red River[44], affecting the southern portion of the province of Manitoba	Spring 1950	1	100,000	• 10,000 homes damaged • The impact of this flood led to an increased focused on flood mitigation and the future construction of the Winnipeg Floodway	$550 million in property losses

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[39] Canada's Top Ten Weather Stories for 2005." Environment Canada. (2013). Retrieved from: http://www.ec.gc.ca/meteo-weather/default.asp

[40] "Making flood insurable for Canadian homeowners." SwissRe. (2010). Retrieved from: http://www.iclr.org/images/Making_Flood_Insurable_for_Canada.pdf

[41] "Manitoba 2009 spring flood report." (2009). Government of Manitoba. Retrieved from: http://www.gov.mb.ca/waterstewardship/reports/floods/spring_flood_2009.pdf

[42] "1996: Saguenay flood forces mass evacuation." CBC Digital Archives. Retrieved from: http://www.cbc.ca/archives/categories/environment/extreme-weather/the-saguenay-flood/saguenay-flood-forces-mass-evacuation.html

[43] "Hurricane Hazel: 60 Years Later." (2014) Toronto Region and Conservation. Retrieved from: www.hurricanehazel.ca

[44] "Manitoba 2009 spring flood report." (2009). Government of Manitoba. Retrieved from: http://www.gov.mb.ca/waterstewardship/reports/floods/spring_flood_2009.pdf

Flood Description	Year	Number of Deaths	Number of Evacuees	Impacts	Estimated Total Costs
Fraser Valley, affecting the province of British Columbia	May – June 1948	10	16,000	• 2,300 homes destroyed	$20 million ($146.9 million in 1998[45]) (approx. $205 million today)[46]

2.4.5 Overview of Impacts

Faced with such an unprecedented event, the GoA immediately realized that the long-term impacts could be catastrophic if a plan was not developed to manage the recovery efforts post disaster response. The provincial government acted quickly and revitalized the task force model that was developed during the 2011 Slave Lake fire to oversee the recovery efforts. The Flood Recovery Task Force (FRTF) was established on June 21, 2013.

While first responders, the Canadian Forces, AEMA and local officials worked around the clock to ensure the safety of Albertans, the FRTF immediately began assessing the situation and putting together a framework for recovery. The FRTF included representation from multiple government agencies and departments, and enabled quick decision making and execution. The FRTF had a direct link to the Ministerial Task Force (MTF) and the provincial Treasury Board, which was used on more than one occasion to approve emergency funding for the response and recovery efforts. The FRTF was responsible for addressing many of the initial impacts of the flood in the days after the disaster.

An overview of impacts included:[47]

- 14,500 homes damaged
- 10 health facilities damaged
- 80 schools damaged
- 100,000 people evacuated
- 3,000 businesses affected
- 30 communities impacted
- 985 km of roads closed

Although the impacts listed above are staggering, the tragic deaths of five Albertans as a result of the flood has certainly been the province's most severe loss.

The immense financial damages inflicted on Albertans in June 2013 not only qualified this event as the most expensive flood in Canadian history, the Insurance Bureau of Canada reported as early as September 2013 that it surpassed the 1998 ice storm in Ontario, Quebec and Atlantic Canada as the most expensive natural disaster the country has ever experienced. Current estimates place the damages at approximately $6 billion[48], which greatly surpasses the cost of any other flood recorded in Canada. Approximately $5 billion was non-insurable, while according to the Insurance Bureau of Canada and Property Claims Services, approximately $1.74 billion can be classified as insured damages[49]. Both the 2009 Red River flood and the 2011 Assiniboine River flood[50] resulted in an estimated $1 billion dollars in damages. The 2004 Edmonton flood caused an estimated $303[51] million dollars in damages, and southern Alberta's last major flood in 2005 resulted in an estimated $440 million dollars in damages.

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[45] "Flooding Events in Canada – British Columbia." Environmental Canada (2010). Retrieved from: https://www.ec.gc.ca/eau-water/default.asp?lang=En&n=B7B62836-1#sub2

[46] "Inflation Calculator." Bank of Canada (2015). Retrieved from: http://www.bankofcanada.ca/

[47] Hale, Twyla. (2014). *Southern Alberta Flood Disaster Recovery* Program [Powerpoint slides]. Retrieved from http://www.aema.alberta.ca/alberta-emergency-management-agency-stakeholder-summits.cfm

The DRP, the province's grant program, was designed to cover uninsurable losses and return damaged property to a basic level of functionality. The DRP for the 2013 Floods received 10,592[52] applications, an amount that far exceeded any previous events. Previous DRPs had been created largely to cover loss of municipal infrastructure, rather than individual losses. As of December 31, 2014, approximately 80% of the 10,592 DRP applications had been resolved and closed, the remaining 20% still requiring follow-up action. The government's ongoing efforts to resolve all DRP claims has perhaps been the most widely-covered and discussed aspect of the 2013 floods, highlighting both the complexity of the incident and the importance of future mitigation efforts. As of December 2014 over $108 million in financial aid has already been provided to eligible recipients.

Studies completed on previous disasters of a similar scope suggest that the psychosocial impacts, or those impacts which pertain to both the psychological and social aspects of a disaster, on those affected by widespread disasters can be extensive. During the extensive stakeholder consultation that took place during this review, all stakeholder groups reiterated how severe these psychosocial impacts were for affected citizens, especially those without sufficient social infrastructure in place to fall back on, or those citizens who were vulnerable prior to the flood.

At the provincial and local level, there has been a focus on ensuring that mental health and trauma support counselling is available to citizens as required. In addition, to assist those Albertans without sufficient financial resources, the GoA changed DRP process and advanced funding to assist impacted individuals with contracting work to recover.

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[48] Canada's Top Ten Weather Stories for 2013." Environment Canada. (2014). Retrieved from: http://www.ec.gc.ca/meteo-weather/default.asp

[49] "Canada Inundated by Severe Weather in 2013." (2014). Insurance Bureau of Canada. Retrieved from: http://www.ibc.ca/on/resources/media-centre/media-releases/canada-inundated-by-severe-weather-in-2013-insurance-companies-pay-out-record-breaking-$3-2-billion-to-policyholders

[50] "Manitoba 2011 flood review task force report." (2013). Government of Manitoba. Retrieved from: http://www.gov.mb.ca/asset_library/en/2011flood/flood_review_task_force_report.pdf

[51] "Top five most expensive floods in Canada this century." The Weather Network. (2014). Retrieved from: http://www.theweathernetwork.com/news/articles/top-five-most-expensive-floods-in-canada-this-century-/25124/

[52] Hale, Twyla. (2014). *Southern Alberta Flood Disaster Recovery* Program [Powerpoint slides]. Retrieved from http://www.aema.alberta.ca/alberta-emergency-management-agency-stakeholder-summits.cfm

3 Observations, Findings and Recommendations

3.1 Introduction

The observations and findings found in this section represent a compilation and synthesis of data collected and analyzed through consultations with over 150 stakeholders, a review of documentation to include improvement efforts since the 2013 floods, current programs and plans and relevant legislation, and a jurisdictional review of other large-scale disaster events in Canada and globally. A large volume of information was gathered throughout the course of this review, considerable effort was made to ensure a broad group of stakeholders had the opportunity to provide input through consultations and that all relevant information was reviewed.

While the results that emerged from the analysis are well aligned to the pillars of emergency management, it became clear that the majority of the observations, findings and recommendations mutually support five (5) overarching and interrelated themes. Issues and details within each of these themes cross the different pillars of emergency management and incorporate observations related to the seven (7) objective areas. The themes are as follows:

1. People, Attitude and Approach
2. Provincial Frameworks, Structures and Plans
3. Emergency Management Capacity
4. Communications
5. Continuous Improvement

The results have been organized into three sub-sections as follows:

- **Overview:** A short overview summarizing the overall results of the review and analysis.
- **Main Themes:** The observations, findings and recommendations as they relate to the five overarching themes. Relevant recommendations are made throughout, and brought together in Key Recommendations found in the final section of this report.
- **Stakeholder Observations by Review Objective:** The specific observations of each stakeholder group for each of the seven objective areas. While these support the five overarching themes, the consultations also capture the unique perspective of each stakeholder group and, along with the documentation review and jurisdictional review, help ensure comprehensive and fact-based recommendations.

Additional comparison and benchmarking data ascertained through the jurisdictional review has been provided throughout the sub-sections to provide additional context and support.

3.2 Overview and Main Themes

3.2.1 Overview - A Success Story for Alberta, But Still Work to Do

Considering the size of the geographic area impacted, speed of onset, and scope of damage, the response and to, recovery from, the 2013 floods can be viewed as a success and should be a source of pride for the GoA, impacted communities and all Albertans. Although it was not without shortfalls and identified areas for improvement, the provincial government's response and recovery was, all things considered, unprecedented and considered effective.

Activities and actions taken prior to, during, and after the flooding were in accordance with emergency management leading practices. When compared to similar sized disasters in Canada and globally, the GoA's performance is assessed to be at least on par with others, and in many areas superior. Despite the challenges faced and hardships suffered, most interviewees remarked that they could not think of a jurisdiction in Canada that would have responded more effectively. As one senior official from a particularly hard-hit community noted, "We are lucky to live in Alberta and lucky to live in Canada, compared to anywhere else on earth where this could have happened."

A number of lessons have been learned as a result of the 2013 floods; however, a lesson has not been truly learned until improvement actions have been fully implemented. As has been noted following similar large scale flooding disasters in the United States, implementing improvements for emergency response can take up to three (3) years, and full recovery can take up to ten (10) years or more in some cases. As such, it is essential that the GoA remain focused on emergency management improvement initiatives, those already in progress as well as recommendations in this report, and continue to take action to reduce the risk of struggling with the same issues during the next large scale disaster. Albertans will be expecting improvement.

3.2.2 Themes

3.2.2.1 Introduction of Themes

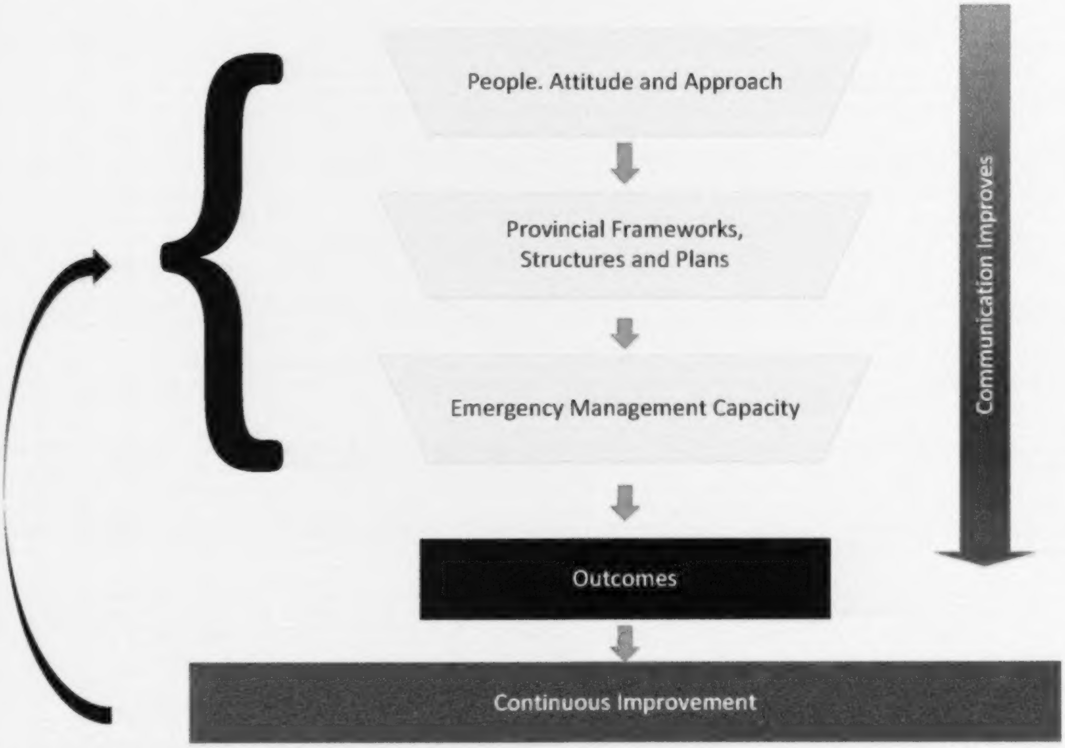
Common observations and findings can generally be grouped into the five (5) main themes. These overall themes are inter-related, mutually supporting and include the perspective of all stakeholder groups.

The themes, listed below and articulated further in the following pages, include strengths as well as opportunities for improvement and specific findings.

1. **People, Attitude and Approach**: The attitude and approach that people throughout the GoA demonstrated during response and recovery, as well as recognition of the emergency management skills and expertise resident within the government.
2. **Provincial Frameworks, Structures, and Plans**: The provincial level frameworks, structures and plans intended to guide, direct, harness and coordinate emergency management in Alberta. This includes, but is not limited to: legislation and the Alberta Emergency Plan; Public Safety Governance; MTF and Recovery Task Force structures; Emergency Social Services (ESS) Framework; DRP; resource management; the role of elected officials; POC infrastructure; and, Government of Alberta Business Continuity Program.
3. **Emergency Management Capacity**: The activities and programs required to ensure that frameworks, structures and plans can be effectively executed at the provincial and municipal levels. This includes, but is not limited to: training, awareness, and exercises; Field Officers, regional approach, and municipal capacity building; emergency management in First Nations; and, staffing levels and capacity.
4. **Communications**: The processes and structures that oversee the passage and flow of information within the GoA, from the GoA to municipalities and First Nations, and from the GoA to the public.
5. **Continuous Improvement**: The focus by the GoA on learning from and implementing improvements based on previous emergency events, including improvements made following the 2011 Slave Lake fires, ongoing improvement initiatives, and the requirement to maintain improvement momentum.

3.2.2.2 Inter-relationship of Themes

The diagram below, and the text that follows, depicts the inter-relationship of the five (5) main themes.


People. Attitude and Approach
Provincial Frameworks, Structures and Plans
Emergency Management Capacity
Outcomes
Continuous Improvement
Communication Improves

As the diagram indicates, the five (5) main themes were found to be inter-related and mutually supporting. It was found that the people, attitude and approach, the provincial frameworks, structures and plans, and the level of existing emergency management capacity had a direct impact in the level of communications. Outcomes can and have been measured to drive the continuous improvement of the execution of response and recovery initiatives in Alberta. The following describes the inter-relationship of the main themes in more detail.

- The overall attitude and approach of people and the GoA, specifically the "can do" attitude, acknowledgement that it was not "business as usual", and the extraordinary efforts of individuals and groups involved, was a noted strength.
- The efforts of individuals and groups were most effective when guided, informed and supported by established frameworks, structures and plans.
- There are extensive emergency management skills, capability and capacity throughout the GoA and the province. These skills and capabilities are not only resident within the Ministries but also throughout municipalities, non-government organizations, Federal partners and industry. The key role of the AEMA and the GoA is to ensure that appropriate frameworks, structures and plans are in place so this capacity can be harnessed and coordinated.
- In order to successfully implement and execute the frameworks, structures and plans the required emergency management capacity must be in place. Emergency management capacity is built through: training, awareness and exercises; structures and programs to assist municipalities and

First Nations with emergency management capacity; and, ensuring appropriate staffing levels and staff capacity.

- Any identified issues and challenges with respect to communications were largely symptomatic of gaps within the other themes. The effectiveness of communication increased when it was guided by a framework, structure or plan, and increased even further when people were aware of, trained in, and supported by an applicable framework, structure or plan.
- A culture of continuous improvement exists within the province. Improvement initiatives undertaken between 2011 and 2013, and ongoing improvement initiatives implemented since the 2013 floods, were found to be a foundational component that supports and enhances the other themes.

3.3 Observations, Findings and Recommendations by Theme

3.3.1 People, Attitude and Approach

This theme relates to the underpinning attitude and approach that people throughout the GoA demonstrated during response and recovery, as well as recognition of the skills and expertise resident within the government.

3.3.1.1 Observations and Findings

3.3.1.1.1 Observations

The most consistent and recurring theme throughout this review was the significant role that people, both as individuals and groups, played in the response and recovery efforts. The prevailing attitude and approach to do whatever it took to help Albertans was a key strength and success driver. While the scope of this report is focused on the GoA, it is important to note that the extraordinary and heroic individual and group efforts displayed by provincial leaders and government employees was also evident in municipalities, NGOs, industry and federal stakeholders, and citizens.

Leadership throughout the GoA recognised immediately that the situation was not "business as usual" and that extraordinary efforts would be required to deal with this extraordinary event. The strength of character and good intentions of provincial staff at all levels were noted by all stakeholder groups. The desire of the GoA to "do the right thing" for Albertans was evident immediately with the commitment of funding and resources and continued to be demonstrated at all levels throughout response and immediate recovery. The majority of stakeholders interviewed indicated that provincial government staff they interacted with were competent, capable, supportive, and above all, doing their best to help. It was clearly demonstrated that there are people at all positions and levels with the government that have the skills, capability and drive to execute the province's response and recovery operations. AEMA and FRTF members interviewed confirmed that other ministries were willing to share their resources and subject matter experts. As one ministry staff stated, "Before the flood I was not aware of depth and breadth of skills and expertise within our government."

Although AEMA and the province had sound emergency management systems and procedures in place, the size and scope of the 2013 flooding challenged the system to a degree never before experienced. The use of established procedures by determined and experienced leaders and staff allowed the province to gain control of an extremely difficult situation relatively quickly and execute what stakeholders have assessed overall as an effective response and recovery, although shortfalls were identified. As was noted by many interviewees within the GoA, as well as some municipalities, it was the overall "can do" attitude and exceptional work of individuals at all levels that often made the difference.

The value of the GoA's overall attitude and approach towards the disaster was evident in the amount of adaptation, innovation and development of the new processes and structures required "on the fly". Throughout response and immediate recovery there were a number of instances where leaders were either faced with situations that they had not encountered before, or they did not have a pre-established process for. Many of these will be covered in other areas of this report but examples include the lack of a detailed process for declaring a State of Provincial Emergency, and the absence of a documented and structured provincial recovery framework or plan. In these cases, as with similar ones encountered, people found ways to overcome challenges. The fact that this approach succeeded was a result of the overarching "can do" attitude and is a credit to those involved.

While the exceptional effort and demands required are recognized, it was also noted that these demands took a toll on individuals. Many GoA interviewees, ministers and elected officials, and a large number of municipalities singled out specific individuals, from all levels within AEMA and the province, who went above and beyond. The words "hero" and "exceptional public servant" were heard often throughout the consultations. While this has been acknowledged and provides clear evidence of the approach and attitude taken, it did in some cases have a negative impact on individuals with some experiencing "burn out" and instances of hospitalisation. Also recognised was the additional work and effort put forth by those provincial staff who were not directly involved in response or recovery but maintained government services and routine operations while their colleagues were working on flood related activities.

3.3.1.1.2 Findings

The overall attitude and "can do" approach displayed by individuals and the GoA was critical to effective response and recovery and should remain the foundational base for any future disasters. The tone was set from the highest levels of government. It was established very early that it was not "business as usual" and the government was ready to support Albertans. This, combined with the exceptional effort and work of individuals, set the conditions for the development of new frameworks and procedures, rapid decision making, and on the ground execution. Those involved in the development of new frameworks during the actual response and recovery all identified the need to formalise the documents and make them part of the province's emergency management system.

A key overall finding, and one that links this theme to other themes, was that in situations where there were established and practiced frameworks, plans and procedures, supported by clear and known roles and responsibilities, the "can do" approach was channeled to great effect. In circumstances where established frameworks, plans and procedures were not in place, or individuals did not understand them and/or their role, the good intentions of individuals and groups caused friction. Specific examples are explored in detail in other areas of this report. However, what became very clear following the analysis of the data was that the "can do" attitude is most effective when channelled by established and practiced frameworks, plans and procedures and supported by overall awareness of emergency management systems. This can be resolved by ensuring the required frameworks, plans and procedures are in place and, training and awareness is a focus for all levels within the GoA.

3.3.1.1.3 Recommendations

- Sustain the "can do" attitude and overarching approach that a disaster is not "business as usual" for the GoA. This is best reinforced by GoA leadership setting the appropriate tone from the top.
- Ensure established and practiced frameworks, plans and procedures are in place in order to harness the depth of knowledge and expertise within the GoA and channel/guide the "can do" attitude and good intentions of groups and individuals.
- Develop a basic framework and procedures to assist in caring for the physical and mental health of GoA staff both during and after the disaster. This should include stress management and a reward/recognition program.

3.3.2 Provincial Frameworks, Structures and Plans

This theme consists of the provincial level frameworks, structures and plans intended to guide, direct, harness, and coordinate key parts of Alberta's emergency management system. It includes but is not limited to: legislation and the Alberta Emergency Plan; Public Safety Governance; MTF and recovery Task Force structures; ESS Framework; DRP; Resource Management; the role of elected officials; POC infrastructure; and, Government of Alberta Business Continuity Program.

3.3.2.1 General Observations and Findings

3.3.2.1.1 Observations

Overall, the GoA effectively mounted a "whole of government" response and recovery effort. There were clear areas of strength, but it was also recognised that provincial frameworks, structures and plans is an area to continue to refine and enhance. From the onset of the flood, response and recovery efforts were coordinated with involvement from all levels of government. Fulfilling their normal role, AEMA coordinated operations from the POC, liaising closely with Field Officers deployed to support municipalities. The POC included trained Consequence Management Officers (CMOs) and representation from across all applicable Ministries as well as participation from federal partners, industry and non-governmental organisations (NGOs). Due to the magnitude of the impact, it was recognised early that additional support would be required to manage the intermediate and long-term recovery operations. Leveraging a structure that had been successfully implemented during the Slave Lake fire of 2011, the cross-ministry FRTF was created to oversee the recovery efforts.

Although stakeholders generally rated inter-agency and cross government coordination as effective, it was also stressed that coordinating activities and resources in a rapidly changing and stressful environment as experienced during the 2013 floods is inherently difficult. This complex coordination was one of the common challenges noted throughout the jurisdictional review, specifically in events of a similar scale such as Hurricane Katrina in 2005 and Australia's Queensland floods in 2011 that necessitated a "whole of government" approach. There are often gaps in communication and coordination as a result of these large-scale, sudden onset events. The GoA's response to the 2013 floods was not unique in this respect, but considering the unprecedented scope and number of Albertans affected, their response and recovery efforts were well coordinated overall. It should also be noted that following both Hurricane Katrina and the Australia's Queensland floods substantial changes were made to improve frameworks, structure and plans used to coordinate efforts.

It was identified that a key enabler for effective "whole of government" engagement was comprehensive and well thought out frameworks, structures and plan. In some cases these enablers were a strength during the 2013 floods and in other cases areas for improvement were identified. As was described by a senior AEMA staff member, effective and value added engagement does not happen simply by linking organisations and people at time of disaster and stating, "All of government is involved." As was demonstrated throughout response and recovery, the foundation for effective inter-agency and "whole of government" engagement is based on having frameworks, structures and plans in place prior to the disaster.

3.3.2.1.2 Findings

Throughout stakeholder consultation, documentation review and the jurisdictional review it became clear that extensive emergency management skills, capability and capacity exists throughout the province of Alberta. These skills and capabilities are not only resident within the Ministries but also throughout municipalities, NGOs, Federal partners and industry. In particular, it was determined that the larger municipalities included as part of this review have mature emergency management programs and significant expertise, capability and willingness to assist the province and small communities. In addition, the depth and breadth of knowledge and experience within the various NGOs is impressive. The value of coordinated efforts with the military, selected Federal partners, and industry was also clearly demonstrated. Overall, the 2013 floods highlighted the extensive emergency management capabilities in the province.

It is essential that at the provincial level frameworks, structures and plans are in place to harness and coordinate the province's emergency management capability and capacity. The responsibilities of AEMA, on behalf of the GoA, as articulated in the Government Emergency Management Regulation are clear. The critical component and one that was highlighted during the 2013 floods is to ensure the appropriate provincial-level frameworks, structures and plans are in place in order to provide the mandated coordination, policy direction, leadership, plan, consultation and assistance. Overall AEMA and the GoA have been successful in executing their responsibilities but a sustained effort will be required to foster and maintain the areas of strength and address opportunities for improvement with the frameworks, structures and plans.

3.3.2.1.3 Recommendations

- In order to effectively harness the emergency management capacity and capabilities of Ministries, municipalities and other stakeholders the province should ensure that appropriate provincial-level frameworks, structures and plans for all aspects of emergency management are in place.

3.3.2.2 Legislation and the Alberta Emergency Plan

3.3.2.2.1 Observations

Overall stakeholders found that existing legislation was generally suitable, functioned well during the 2013 floods, and major changes are not required. Emergency management legislation in Alberta is found in the Emergency Management Act, last amended in December 2013, the Government Emergency Management Regulation, amended in 2012, the Disaster Recovery Regulation last updated in 2008, and within selected sections of the Municipal Government Act. Within the Government Emergency Management Regulation, the Alberta Emergency Plan is identified as a key document as it provides the base for operational and tactical emergency management activities in the province. Other key frameworks and structures, such as the Public Safety Governance, Ministerial Task Force and Recovery Task Force models, and the Recovery Operations Manual (ROM), are also critical and work together to support the Alberta Emergency Plan and the emergency management legislation. Observations and findings for each of these are discussed in separate sections below.

Stakeholders interviewed from AEMA, across the GoA, and municipalities all acknowledged the importance of effective legislation, and an overall consistent approach to emergency management across the province. Since the flooding a key amendment to the Emergency Management Act has been made which extends the Provincial State of Emergency from 14 days to 28 days. Stakeholders involved in the declaration of High River's Provincial State of Emergency confirmed that this change will alleviate the stress around the 'return-to-normal' and perceived loss of provincial support in the early stages of recovery.

In December 2013, Bill 27: The Flood Recovery and Reconstitution Act, amended the Municipal Government Act to provide regulation and limitations regarding development in a floodway and in flood fringe areas. The overall intent is to ensure rebuilding occurs in a way that limits impact and damage from any future floods. During the 2013 flood this amendment was deemed to be required as soon as possible. The speed in which this issue was addressed was impressive; but, those involved acknowledged the challenge and difficulty of tackling such a complex and emotive issue within a compressed timeline. Subsequently, a Floodway Development Regulation Task Force was formed, extensive stakeholder consultation took place and a comprehensive discussion paper was developed in late August 2014.

Prior to the 2013 flooding the Alberta Emergency Management Plan had not been updated since 2008. While at first glance this may appear to be a substantial gap, in reality it was not. This is due to the fact that overarching Public Safety Governance was established and, more importantly, an updated and comprehensive set of Standard Operating Procedures (SOPs) for the Provincial Operations Centre were developed and implemented by the time the 2013 flooding hit. These SOPs cover much of which is normally included in an emergency management plan and were effectively used in the POC.

While generally assessed as effective, opportunities for improvement regarding existing legislation were identified during the stakeholder consultations. Many found that the legislation lacks the standards, definitions and references to best practices that would help with a consistent approach to emergency management across the province. Others stated it is not prescriptive enough, and would like to see additional requirements for exercises and training, risk assessments and implementation of the Incident Command System (ICS).

3.3.2.2.2 Findings

Major changes to emergency management legislation does not appear to be required. Updates to legislation after large-scale disasters are common and provide a mechanism for formalizing key improvement measures. The United States, in particular, has legislated policy improvements after both Hurricane Sandy and Hurricane Katrina. In Alberta continuous improvement efforts to legislation, specifically the changes to the Emergency Management Act and the introduction of Bill 27, are aligned with the approach that has been taken elsewhere in North America. What is of particular note is the fact that Alberta implemented these changes relatively quickly following the 2013 floods. While the speed with which legislative changes were made is positive, the challenges with respect to changing complex policy relatively quickly should be carefully considered in the future. In 2013, the speed with which new policy was developed placed considerable demands on individuals developing the policy and those required to comply. It was clear through stakeholder consultation, and a review of updated legislation, that potential challenges inherent to implementing such a far-reaching new policy are being carefully considered and carried out in a sequenced and methodical manner.

Work to update the Alberta Emergency Plan was underway prior to the 2013 flooding and in the final stages of approval and implementation. This plan should be viewed by the GoA and all municipalities as a key document that drives emergency management in Alberta. Along with the details contained in the Public Safety Governance, many of AEMA's responsibilities listed in the Government Emergency Management Regulation hinge on comprehensive direction in the Alberta Emergency Plan.

Gaps noted with respect to legislation can be addressed in the Alberta Emergency Plan and include, but are not limited to: directing municipalities to conduct full hazard, risk and vulnerability assessments (HRVAs); requirement for annual emergency management exercises; and, implementation of ICS for those who have not already done so. In particular, the value of using ICS was clearly demonstrated during the 2013 floods and improving and adapting this system to meet the needs of the GoA should be a priority. There are select provinces which address these issues in legislation or in their provincial emergency plan. Further detail is provided in Appendix E. AEMA, and AEMA Field Officers, are well positioned to assist the municipalities with these requirements and support the mandated responsibilities of AEMA as outlined in the Government Emergency Management Regulation.

3.3.2.2.3 Recommendations

- The Alberta Emergency Plan should be considered as the key document for ensuring a unified and coordinated approach to emergency management throughout the province. The document should clearly articulate the requirements outlined in the Government Emergency Management Regulation, details from Public Safety Governance and specifics such as direction to municipalities with respect to:
  - Implementation and use of ICS
  - Plan structure and direction on what should be included in an emergency plan
  - Conduct of hazard, risk and vulnerability assessments (HRVAs)
  - Roles and responsibilities of AEMA Field Officers
  - Guidance for the regionalization of emergency management programs, including Memorandums of Understanding (MOUs) and resource sharing where applicable
  - Development and deployment of Incident Management Teams (IMTs)
  - Outline roles for elected officials
  - Requirements for municipal plan testing and exercises
  - Requirements for regular plan maintenance

3.3.2.3 Alberta's Public Safety Governance

3.3.2.3.1 Observations

In early 2012, shortly after the Lesser Slave Lake Fires of 2011 and inspired by an increasing number of disasters that had life safety, environment and economic impacts, the province completed an internal Ministerial Report called 'Strengthening the Governance of Alberta's Public Safety System.'

The document provides a framework and includes five strategic objectives for the province's governance model and numerous supporting actions to improve the planning, coordination and communication challenges faced by Alberta during an emergency. This framework enhanced the province's public safety system in all pillars of emergency management. Using this document as a blueprint, the province has made measurable and noticeable improvements to the emergency management system. An important observation is that this document presented a robust public safety governance model that initiated clear actions and improvements. In many ways the 2013 floods were viewed as a test of this framework and by all accounts it proved to be effective. In particular, it helped ensure coordinated and effective engagement of key Ministries and external emergency management partners.

3.3.2.3.2 Findings

The value and positive impact that this sound public safety framework had on the 2013 flood response and recovery should not be understated. Although aspects of the governance may require refinement and regular updates, this fundamental framework and supporting structures helped drive specific actions that set the conditions for improved overall coordination and effective "whole of government" engagement.

3.3.2.3.3 Recommendations

- The GoA should continue to follow and refine the public safety governance framework and make adjustments if required based on lessons learned from the 2013 floods.

3.3.2.4 Ministerial Task Force and Flood Recovery Task Force

3.3.2.4.1 Observations

Almost without exception, all stakeholders agreed that the MTF and supporting FRTF were extremely valuable and should be formalized and used for future events. Creation of the MTF was new for Alberta and was formed as a sub-committee of provincial Cabinet. The MTF had both a direct line to the Premier's Office and the Treasury Board, and the authority to make decisions and expend funds. The FRTF was established by the MTF to lead the overall recovery efforts, with the exception of the DRP which remained with AEMA. Development of the Flood Recovery Framework and the formation of the FRTF was completed in a short period of time. Within a week, the Chief ADM was identified to lead the task force, analysis took place, provincial flood recovery framework was developed and FRTF was formed and working. The fact that this was able to occur so quickly is noteworthy and a testament to the individuals involved.

Under the leadership of the Chief ADM, task force team members were drawn from across the GoA. The FRTF provided advice and recommendations to the MTF. To further assist with effective cross-ministry coordination and collaboration, and leveraging another lesson learned from Slave Lake, an Assistant Deputy Minister's (ADM) core group was formed to further enhance communication and decision making. In practice, the structure provided an efficient and streamlined process for making quick and important decisions throughout the recovery effort. These decisions included changes to policy and project approvals, and authorizing funds needed for recovery. The support provided by the MTF and FRTF was viewed as critical to the success of recovery efforts. Stakeholders noted that this system was so efficient that at times the MTF and FRTF were making decisions in two (2) weeks that normally take the government six (6) months. The speed and effectiveness of decision making was not only mentioned by stakeholders interviewed as part of this review, but also in a 2014 recovery strategy workshop facilitated by a globally recognized third party consulting firm who also stated that they had never witnessed a system that worked as effectively as Alberta's MTF and FRTF.

Although the value and overall success of the MTF and FRTF approach cannot be disputed, some key opportunities for improvement were also identified. It was widely known and understood that several levels of government were involved in the response and recovery efforts, but the specific mandate of the FRTF was not understood throughout the GoA and in some municipalities. Many municipalities indicated that they did not know who their key point of contact was for recovery, and this caused a degree of confusion. It was particularly confusing where there were Field Officers and FRTF members present on-site at the same time.

A number of interviewees from the GoA also stated that the government needs to increase its "bench strength" by proactively developing recovery skills and knowledge of additional ADMs. During both Slave Lake and the 2013 Flood, the province tasked civil servants who were former high-ranking military officers to lead recovery efforts. As the Chief ADM for 2013 openly acknowledged, it was experience and systems from his previous career that enabled him to be effective and this is not a sustainable model for the government.

Since the 2013 floods, the GoA has taken substantial steps to document the lessons learned regarding the MTF and FRTF. A comprehensive and informative lessons learned report was completed by the FRTF in June 2014. This report included consultation with the AEMA, key Ministries and organisations involved in response and recovery as well as input from the FRTF branches and the ADM Core Group. These learnings have been formalized and used to develop a practical guide for future recovery operations within the ROM.

The development of the ROM is a major step to ensuring that procedures are documented and it sets a foundation for training and operationalizing recovery. The value of forming a standing sub-committee to serve as the MTF was also important. To support this, the GoA should consider proactively engage Ministers, ensure they understand the role of the MTF and are ready to hit the ground running during future emergencies.

The draft ROM currently in place provides a clear organizational structure for any subsequent task force and includes roles, responsibilities and reporting structures for each position. In addition, the manual includes a framework for a full task force team that is scalable and can be reduced if required. For example, during the 2014 floods the creation of a task force was carefully considered, but due to the scope of these floods was ultimately determined to be unnecessary.

3.3.2.4.2 Findings

The MTF and FRTF models clearly worked and helped enable an efficient recovery effort, and should be sustained and fully implemented. The concept for creating the MTF and FRTF structures in Alberta leveraged experiences from Slave Lake and is also aligned with leading practices for providing sustained recovery efforts. Recent large-scale disasters of similar scope, including Hurricane Sandy, Hurricane Katrina, the 2010 earthquake in Chile and the flooding in Queensland, Australia, have also relied on government task forces to oversee the coordination of sustained recovery efforts. What is somewhat unique to Alberta in 2013 was the speed in which the systems were put in place, the fact that a comprehensive Provincial Recovery Framework for the flood recovery was developed, and generally how quickly issues were escalated and decisions were made.

The vast majority of friction points and issues identified with respect to the FRTF were not related to the actual models themselves, but directly linked to details such as awareness of FRTF mandate, roles, staffing and the lack of training for FRTF members. What is critical for the province now is to fully implement and imbed the improvements made to date, and action the recovery lessons learned. This includes operationalising and rolling out the ROM, identifying staff, and training. The Recovery Programs branch within AEMA is best suited to own this document and ensure its implementation.

Whereas the Greater Slave Lake fire disaster was an impetus for substantial improvement to emergency response, experiences from the 2013 flood should be used by the GoA to make substantial improvements to recovery. If a large scale disaster were to hit Alberta again, and the MTF and recovery task force models were activated, the lessons from 2013 and the ROM would certainly help; but, details of execution would still be a challenge if the staff for the designated positions were not previously selected and trained, stakeholders were not fully aware of mandates and roles, or lessons learned were not actioned.

The lessons learned report completed by the FRTF in June 2014 outlines sound, fact-based recommendations for improvement. See Appendix C for a full list of the FRTF's recommendations. The results of the stakeholder consultation and jurisdiction review conducted as part of this review support these recommendations.

3.3.2.4.3 Recommendations

- Implement the recommendations outlined in the FRTF's Lessons Learned report dated June 2014 (see Appendix C).
- Implement and operationalize the ROM to include:
    - Identifying and training staff for each position
    - Ensuring an appropriate emergency operations facility
    - Conducting of recovery-focused exercises

3.3.2.5 Emergency Social Services (ESS) Framework

3.3.2.5.1 Observations

For clarity, and before examining specific observations, ESS are those elements of emergency response and recovery that relate to the emotional and physical needs of the individuals affected by a disaster. ESS is sometimes also referred to as disaster social services. The primary components of ESS are:

- Emergency food
- Emergency lodging
- Emergency clothing
- Registration and inquiry
- Reception centres
- Personal services including emergency funds, emotional support and pet services

All stakeholder groups identified challenges with the communication, coordination and delivery of ESS. Based on stakeholder consultations and the documentation review, formalizing the coordination and delivery of emergency social services appears to have been a known weak point for the province. Improvements in this area have been a longstanding recommendation noted in previous provincial reports. The GoA's public safety governance document, released in 2012, recommended developing a role for the provincial disaster social services system, or ESS, and the lessons learned report from Slave Lake, released in 2013, recommended developing a provincial approach for the coordinated delivery across ministries of disaster social services.

According to stakeholder consultations, weeks before the 2013 floods hit, Alberta Human Services accepted its mandate to oversee ESS. As such, the province's ESS framework was not fully developed at the time of the 2013 floods. As the necessary framework, programs and processes were not yet in place it was not surprising that challenges arose related to coordination, communication, and roles and responsibilities. While individuals put forth extraordinary effort to provide ESS through response, stabilisation and into recovery, the lack of a pre-determined framework and plan hampered activities and caused frustration at many levels.

The lack of an ESS framework, and clarity around structure and processes, caused a great deal of confusion within the GoA and amongst municipalities and NGOs. As operations transitioned from response to recovery both Human Services and the FRTF were seen to be providing ESS supports, leading to a great deal of confusion as to who was overseeing this role.

The ESS work of the provincial government, and the impacted municipalities was complemented by NGOs and volunteers from across the province as well as groups coming from outside of Alberta.

Affiliated volunteer agencies including the Red Cross, Salvation Army and Samaritan's Purse, provided considerable emergency management capacity and assistance.

The NGO Council worked with the POC to coordinate delivery of significant emergency social services to Albertans. The resources, expertise and strength in numbers provided by the NGO Council's members were viewed as critical. The NGO Council is a group of not-for-profit non-government organizations that offer one of more social or health services that meet a legitimate disaster relief need and are prepared to offer their services to any community within Alberta. It provides a forum for their members to develop relationships and share non-confidential information related to disaster response prior to the occurrence of a disaster. Regular members of the NGO Council include: the Canadian Convention of Southern Baptist Disaster Relief; Canadian Red Cross; Christian Reformed World Relief Committee; Disaster Child Care; Mennonite Disaster Service; St. John Ambulance; and, the Salvation Army Emergency Disaster Services.

Unaffiliated volunteers also joined the response efforts. High River alone reported that over 8,000 non-affiliated spontaneous volunteers offered their assistance during the first 16 days after the flooding[53]. All stakeholders praised volunteers from affiliated and non-affiliated agencies for their strength of character, efforts and desire to help in a disaster. However, it was also noted that coordinating NGO and volunteer efforts was a challenge. The common opportunity for improvement noted by stakeholders was the need to formalize established and practiced processes to work with NGOs and manage volunteers by quickly matching their skills and expertise with tasks that needed to be completed. The framework and approach for coordination and management of volunteers was identified as being a key component for inclusion in the ESS framework.

The payment card program was generally assessed as positive as it provided rapid emergency funding to those in need. Almost $70 million dollars was distributed to flood-affected Albertans by September 30, 2013. However the system for qualification, distribution, tracking and managing the payment card program was a noted area for improvement and a cause of frustration in some communities. A formalised criteria for when these payments are appropriate, and fully developed procedures for their issue is required. Many noted that the province was not prepared to execute the program, especially for a disaster the size and scope of the 2013 floods.

3.3.2.5.2 Findings

The 2013 floods demonstrated that there is considerable ESS expertise throughout the province of Alberta's specialised ESS skills and capabilities are found throughout the GoA, in municipalities, NGOs, the private sector, and with individual volunteers. These groups worked hard to care for Albertans and helped many citizens affected by the flood. These efforts were appreciated, and would be strengthened by structural improvements to communication, coordination, sourcing and managing logistics. The lack of a unified approach to these elements is linked to the overarching ESS challenge at the provincial level – which is coordinating and harnessing the ESS capacity that already exists.

The issues and difficulties Alberta faced with ESS coordination and delivery in response and recovery during the 2013 floods are not new or unique. They are not dissimilar to those faced on smaller scale at Slave Lake, and are shared by jurisdictions around the world who have had to deal with a large scale disaster. As well, the overarching challenge of harnessing and coordinating the efforts of multiple groups and agencies is not unlike what AEMA was faced with during the other aspects of response, or what the FRTF was dealing with during recovery. However, AEMA had a sound operating framework with documented and practiced plans and procedures in place to guide actions, and the FRTF developed an operating framework before commencing recovery operations. Conversely, an ESS specific framework was not in place, and the inherent complexities in providing ESS were too complicated to develop at time of event.

It is clear that the province needs to prioritize addressing the longstanding recommendation to develop a provincial ESS Framework. After an analysis of information gathered through reviews and stakeholder consultations the complexity of ESS support during a disaster the size and scope of the 2013 floods also became clear. Developing an effective ESS framework at the provincial level is not a simple endeavour. The framework will need to include input and consultation from various stakeholder groups and it must be integrated with AEMA and the overall emergency management system.

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[53] Eckley, Mark and Carly Benson. (2014). *Emergency Planning: Lessons from High River's 2013 Flood.* [Powerpoint slides]. Retrieved from http://www.aema.alberta.ca/alberta-emergency-management-agency-stakeholder-summits.cfm

Benchmarking and jurisdictional review supports the fact that, at the provincial level, Human Services is best suited to lead ESS in Alberta. The basic approach for framework development should include working groups and consultation with the NGO Council, municipalities, and representatives from selected ministries. The approach used by AEMA to develop the Public Safety Governance worked effectively and should be leveraged in the development of the ESS Framework. NGOs stressed that the US is considerably more advanced when it comes to integrated ESS operations and there are some key frameworks and structures that may work well in Alberta. The different NGOs that make up the NGO Council have a wealth of experience, have worked in different jurisdictions around the world and have valuable input. Municipalities in Alberta continue to improve their ESS capacity and the Emergency Social Services Network of Alberta (ESSNA) is a key partner that the province should continue to work with and leverage during framework development.

Careful consideration should be given to the overall structure for the coordination of ESS activities for large scale disasters. Structure could include the establishment of a specific ESS task force at the provincial level. This could include a separate ESS EOC, with all ICS functions, or imbedding the ESS task force in the POC. Regardless of the details and final outcome, it is imperative that the ESS framework include a structure that addresses the specific issues related to roles and responsibilities, coordination, and communication. This framework could serve as the starting point for development of detailed processes and procedures that would provide a more consistent approach. For example, a common registration form should be developed, which would aid considerably in the management of evacuees.

The ESS framework should include a concept for volunteer management and clarity with respect to specifying the provincial responsibilities and what should be managed at the municipal level. In previous large-scale disasters, both in Canada and abroad, spontaneous volunteers have offered their assistance at time of event. Findings from the jurisdictional review confirmed that linking volunteers to appropriate tasks and overseeing their work is a challenge no matter where the disaster occurs. The one constant is that these volunteers always make themselves available, have skills to offer and genuinely want to help.

Guidelines for volunteer management, particular spontaneous unaffiliated volunteers, should be in place and the province should consider ways to assist municipalities and offer some form of training and direction to volunteers. To align with best practices, volunteers are best managed at the municipal level. However, the province can play a role in the overall support. In British Columbia, the Public Safety Lifelines program oversees the activities of volunteers during disasters across the province. Volunteers are provided with online training of relevant legislation and can sign up as registered Emergency Management volunteers in their local area. The program provides a number of specialized areas for volunteers, but it also provides a 'General Services' volunteer category for volunteers willing to provide short-term services during a disaster[54]. Implementing a similar program would add value to Alberta's emergency management system.

Another emerging trend is the use of social media, in particular Twitter hashtags, to provide direction to potential volunteers[55]. This is consistent with reports from the 2013 floods. For example, in Calgary during the floods the hashtag '#yychelps' was used primarily on Twitter to offer assistance. Calgarians used the hashtag to communicate their willingness and availability to help with cleanup efforts and provide specific supplies or resources. This innovative model should be further examined by the province to determine where they can help municipalities through social media training and awareness.

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[54] http://www.embc.gov.bc.ca/em/volunteer/volunteer.html
[55] http://www.threatbrief.com/wp-content/uploads/2014/11/TB-012_Hashtag-Standards.pdf

3.3.2.5.3 Recommendations

- It is recommended that volunteer management remain a municipal responsibility. However, the province should consider developing a program similar to British Columbia's Public Safety Lifelines program (outlined above).
- Develop the criteria and detailed process and procedures, to include roles and responsibilities, for distribution and management of emergency payments to displaced residents
- As a priority, and working with municipalities, NGOs and applicable GoA Ministries, develop a provincial ESS Framework including but not limited to:
    - Delineation of roles and responsibilities for all ESS stakeholders
    - Integration and communication points between all ESS stakeholders
    - Concept for emergency interim accommodation
    - Resource sharing framework
    - Volunteer management
    - Donations management
    - Assistance and information teams to support displaced residents
    - Common forms and procedures
    - ESS support for re-entry planning
    - Psychological and social support

3.3.2.6 Alberta's Disaster Recovery Program

3.3.2.6.1 Observations

The DRP is a key component of the overall framework and structure of the emergency management system in Alberta. By all accounts, portions of the province's DRP were not designed to respond to the expectations or a disaster of the scope and magnitude of the 2013 floods. As a result, delivering aspects of the program was troubled from the start. The GoA, and those responsible for the DRP, are well aware of the program's limitations. A thorough review of the DRP has been completed and a redesign is in progress.

One of the most significant challenges faced, and a common point raised by during stakeholder consultations, was managing the expectations around the DRP. Exactly what the DRP was, and what it was intended to do, was not well known throughout the GoA, by senior officials or the public. The program was initially advertised by some senior officials to be similar to a form of insurance. This led those impacted to believe the DRP would fully recover losses when it was only designed to help people and communities get back on their feet.

The intent of the DRP as stated in Alberta Disaster Assistance Guidelines, Appendix A to Ministerial order A:002/12 is as follows:

- *Repair, rebuild and restore public works and the essential community services to their pre-disaster functional capabilities.* In this area recovery has gone very well. Stakeholders from all groups mentioned the speed with which roads and other critical infrastructure were repaired. Those in the hardest hit areas also mentioned how pleased and grateful they are for the provincial support and funding for community infrastructure rebuilding.
- *Re-establish or maintain the viability of small businesses and working farms.* While it is extremely unfortunate and tragic that some small businesses were not able to recover, overall small business recovery was not a major concern raised by stakeholders. However, what was made clear is that small business owners had the same challenges and issues with the application process and follow-up as individual claimants.

- *Provide or reinstate the basic essentials of life to individuals, including financial assistance to help repair and restore damaged homes.* It is this aspect of the DRP, the provision of support to the individual, which has by far caused the largest concern and the processes in this area require the greatest amount of change.

There were clear and obvious problems with the program delivery from the start. These problems continued to manifest and led to follow-on issues and challenges. At the time of the 2013 flood, DRP claims were administered by an external contractor and managed by an internal AEMA team of six (6) staff. When overall responsibility for recovery operations were assumed by the FRTF, the ongoing efforts to manage the DRP remained with the six (6) person team from AEMA. In practice, that meant that this limited number of staff were the primary points of contact for all files and questions pertaining to the DRP. The reasoning behind this decision was that these AEMA employees had the significant technical and subject matter expertise relating to the DRP.

As the number of claims mounted, this team became quickly overwhelmed, and did not have the time or capacity to train further staff members. In 2010, flooding in the southern part of the province resulted in over 2644 applications; in response, the province issued approximately $200 million DRP payments, which at the time was the province's largest DRP[56]. The DRP for the 2013 floods generated approximately 10,594 claims and provided over $1.9 billion dollars in eligible costs. Even during the Slave Lake Fires, which resulted in a DRP of over $77.7 million dollars, only three communities were affected and most of the costs to individuals and small businesses were insurable losses[57]. The 2013 floods, in contrast, affected over 30 communities. In short, the DRP was not designed to respond to the 2013 floods. The heightened expectations of some stakeholders further complicated the matter.

The overall problems with the system, and efforts to try to work through the various issues, caused significant stress and hardship on claimants who had already gone through a traumatic event. As well, the system shortfalls and attempts to improve delivery has been extremely hard on the individuals managing and processing DRP files.

Through ongoing assessment by GoA and AEMA staff, and input from groups such as the High River DRP Advocacy Committee, the key issues appear to be widely known and well understood. Overall issues and shortfalls with the DRP system as it applies to individual claimants, and some small business owners, are summarised as follows:

- Time to process claims and close files is too long.
- Lack of staff with required training/knowledge to administer the DRP and understand its complexities.
- Staff continuity and multiple people handling a file.
- Reliance on a paper-based document management system.
- Files are required to undergo multiple levels of review.
- Communications challenges in general and specifically around DRP policy changes.

Some stakeholders also expressed concern over the pace of DRP and perceived slow progress in fixing known issues. As well, some voiced considerable concern over what they believe is the GoA's risk aversion with respect to spending and accounting.

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[56] Government of Alberta. "Southern Alberta Disaster Recovery Program." (2010). Retrieved from: http://www.aema.alberta.ca/documents/ema/0816_-_DRP_Update_Aug_16.pdf

57 Lesser Slave Lake. "Regional Wildfire Recovery Plan." (2011). Retrieved from: http://www.rebuildslavelake.com/uploads/7/6/6/4/7664072/lesser_slave_lake_regional_wildfire_recovery_plan_-_executive_summary1.pdf

3.3.2.6.2 Findings

When reviewing overall recovery from the 2013 floods it is important to examine all aspects of the DRP and other provincial funding that was allocated. Overall recovery went well and continues to progress at a reasonable pace. The GoA has moved forward with large infrastructure re-builds and mitigation projects. The table below is an example of recovery programs implemented by the GoA where funding provided was a mix of DRP and/or other provincially funded programs:

Program Name	Funding Amount
Community stabilization	**$389 million**
Immediate Relief Funding (Emergency funds to 56,000 Albertans evacuated from their homes for seven days or longer)	$66 million
Small Business Rebuilding Program (Assists businesses with 21-50 staff)	$3 million*
Hand-up Plan. Immediate financial assistance to businesses and not-for-profits that are helping communities recover from the 2013 floods. Alberta Flood Recovery Loan Guarantee Program Alberta Flood Recovery Interest Rebate Program	$32 million*
Temporary schools (Calgary and high River)	$46 million
First Nations housing	$342 million
Repair to water infrastructure	$16 million
Stabilization funding for post-secondary institutions	$8 million
Support for cultural and non-profit organizations	$18 million
Long Term Recovery And Mitigation	**$869 million**
Property Tax Relief for impacted municipalities.	$84 million
Support to assist Albertans dealing with stress and trauma	$50 million
Ongoing operational support for flood recovery	$50 million
Erosion control and community flood mitigation projects	$264 million
Flood mitigation project engineering	$20 million
Highway infrastructure resiliency projects	$110 million
Increasing resiliency of schools, hospitals and provincial infrastructure	$90 million
Floodway relocation program.	$137 million
Restoration of fish habitats.	$11 million
Maintaining enrolment funding for impacted school boards	$39 million
Flood hazard studies across the province	$9 million

For the reasons previously mentioned, the DRP process for individual claimants was perhaps the most significant shortfall in the overall recovery efforts and certainly the most public.

It is important to note, however, that the majority of stakeholders interviewed that criticized the handling of the DRP also acknowledge that the program is generous. A comparison of all DRPs offered across Canada confirmed this – Alberta is one of the only provinces without a limit of the amount of compensation that may be offered under the program. Refer to Appendix D for further information on provincial and territorial disaster recovery and financial assistance programs. While this may be of little comfort to those who have struggled with the program, suffered the most emotionally, physically and financially, and feel the government was overly risk averse, it is a fact worth noting.

The province received over 10,594 submissions under the 2013 flood DRP and has closed 8,484 files as of December 2014. The reasons for why the files remain open vary and a number of these are under appeal. Stakeholder consultations indicated that the appeal process put in place functions well. The table below shows the state of DRP files as of December 2014. This information has been made public and the GoA has been transparent in communicating DRP status.

Applications		**Closed Applications – Fully funded**					**Open Applications In Progress**				
Category	**Number Received**	**Withdrawn**	**Ineligible**	**Paid**	**Total**	**Open / Partially Funded**	**Eligibility Review1**	**Applicant Action Required[2]**	**Total**	**Administrative Processing**	**Dollars Paid to Date (millions)**
Agriculture	283	11	95	33	139	144	6	136	142	2	$ 1.93
Condominium	73	17	37	8	62	11	4	7	11	0	$ 0.97
Homeowner	5,701	737	1,012	2,771	4,520	1,181	80	1,084	1,164	17	$ 84.15
Institution	109	10	28	18	56	53	3	45	48	5	$ 1.82
Landlord	724	134	349	79	562	162	24	137	161	1	$ 5.94
Small Business	869	118	411	104	633	236	33	194	227	9	$ 5.09
Tenant	2,835	179	563	1,770	2,512	323	80	240	320	3	$ 8.23
Totals:	**10,594**	**1,206**	**2,495**	**4,783**	**8,484**	**2,110**	**230**	**1,843**	**2,073**	**37**	**$ 108.17**

[1] Eligibility Review may be the responsibility of the DRP or the applicant.

[2] Refers to applications on structural, insurance, tax-document, and receipt hold. About 80% of files have advance issues or are in receipt hold. About 10% of files are awaiting completion of household mitigation. Includes 440 files in appeal which will be moved to complete upon confirmation of final payment or provision of receipts.

Since the 2013 floods, the stakeholder consultations and document review clearly demonstrate that the province has committed an immense amount of time and resources to improve DRP delivery. Examples include:

- Increasing the staff working on DRP from the original six (6) to over 80 during peak recovery efforts. The majority of these were GoA contracted positions or secondments. This number is slowly being reduced. Long term DRP staffing is part of the DRP redevelopment initiative.
- Opening Disaster Recovery Program offices in High River and Calgary to provide in-person service for affected individuals.
- Development of handbooks outlining what the DRP offers for each eligible party, including individuals, small businesses, agricultural producers and municipalities. These handbooks have been made available to members of the public online and at all DRP offices. Included in all materials is an explanation of how the DRP differs from insurance coverage.
- Appointing an Insurance and Disaster Recovery Program Advisory Committee in January 2014 consisting of insurance, legal and risk management professionals. The positive impact of this group resulted in applications in insurance hold being reduced from 1,809 in January 2014 to 503 by the end of March 2014[58]. The two reports completed by this committee also includes valuable recommendations to improve overall DRP delivery as well as suggested changes to the Disaster Recovery Guidelines.
- Adjusting DRP policy to help resolve some of the more complex DRP files, such as those pertaining to older or vintage homes.
- Movement towards adopting a case worker model.
- Internal structural changes in AEMA to better coordinate DRP delivery.

Going forward, to address specific shortfalls identified with respect to individual claimant files, key findings are as follows:

- **Value of the Case Worker Model:** Moving to a case manager system will go a long way in addressing many of the identified issues. This system will increase the speed of resolving files and reduce frustration for all involved, as the case manager will walk the claimant through the process from start to finish. The case manager model will also help address the issues of continuity and frequent file handover, communication between the DRP staff and individual claimant, and staff knowledge of the DRP. In order for this model to work effectively the case workers would require specific training on the DRP, as well as training and experience working with people that have undergone traumatic events. In addition, files would move faster if case worker were given a degree of decision making and spending authority within a certain threshold. The case worker model would need to function out of a local DRP office and this office would require full time leadership (likely at the manager level) who has a direct line to decision makers (e.g. director level) at a regional DRP office or in the GoA.
- **Electronic File System:** The physical management of paper files resulted in documents being lost, notes on files not being transferred when the file changed hands and a number of other issues that caused delay and frustration for all parties. By establishing an effective electronic file management system these issues would largely be resolved.
- **Working with Industry and Private Sector Specialists:** Consideration should be given to increasing speed and capacity by working with the private sector and in particular the insurance industry. These professionals could add capacity and expertise in the areas of damage assessment as well as with specific issues such as insurance holds.

While the efforts by the province to remedy this situation are commendable, and the complexities related to DRP are acknowledged, it is essential that the overall DRP design be completed as quickly as possible and remain a priority. In addition to the initiative to redesign the DRP, the GoA continues to progress with improvements to the system and address unresolved issues from the 2013 flood. Based on the information and analysis conducted as part of this review, it is anticipated and reasonable to assume that service, and statistics related to open files and issues, will continue to improve.

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[58] "Summary of Work and Findings." Insurance and Disaster Recovery Program Advisory Committee (March 30, 2014).

3.3.2.6.3 Recommendations

- Complete the redesign of the DRP to include:
    - Keeping those aspects of the program that worked well (i.e. community infrastructure rebuild)
    - Full move to a case worker model
    - Implementation of electronic file management
    - Comprehensive communication strategy
    - Capacity and capability to open and operate Disaster Recovery Offices in selected communities as required
    - Education of elected officials and the public on DRP including program objectives and limitations
- Identify and partner with selected industries and specialists who can assist with program delivery during large-scale disasters.

3.3.2.7 Role of Elected Officials

3.3.2.7.1 Observations

The role of Alberta's elected officials, where they fit into the emergency management system and how they can provide the greatest value during a disaster was not only mentioned by GoA, municipal, external and industry stakeholders, but also by the elected officials themselves. It was a common point of discussion and recognised as an important component of an effective "whole of government" approach. As Albertans' duly elected representatives, they undeniably have a part to play. The leadership role that elected officials hold in government as well as within their communities makes them a natural point of contact for citizens in distress. During the 2013 floods elected officials at all levels were focused on communicating with their constituents and providing them with relevant information and assistance.

Stakeholders noted that elected officials were effective and served as effective spokespeople during the initial days of the flood. By and large, they were visible to Albertans and delivered consistent and focused messaging to the public during the response phase. However, as the situation evolved from response and stabilisation into intermediate recovery, there were many instances when well-meaning elected officials would make promises without having a plan in place, or verifying whether it was possible to fulfill commitments made. The most striking instance of this was a promise to 'make Albertans whole', which was widely quoted by stakeholders and credited with inflating expectations about what the DRP would do for those affected by the flood. Promises were also made regarding the timeline to deliver interim housing to displaced citizens as well as other key recovery items. The general issue of over promising, or promising more than capacity could delivery, was a key friction point mentioned by stakeholders from the GoA who were working to deliver on the promises, as well as municipalities and external stakeholders.

Stakeholders noted that the province's leadership, including elected officials and Deputy Ministers, did not have a clear understanding of the legislation related to the DRP or the outsourced contract in place to manage the DRP. This meant that elected officials were not always able to communicate accurate information concerning the government's program. All recognised and appreciated that the elected officials were attempting to help but their efforts were not always properly informed.

MLAs interviewed indicated that they had difficulty obtaining the most up to date information and therefore were not able to help with overall communications nor were they adequately able to answer questions from their constituents.

3.3.2.7.2 Findings

Elected officials played a key part in the 2013 floods and were fully committed to doing what they could for their constituents and the people of Alberta. The willingness of the government to help was clearly demonstrated with the unprecedented $1 billion dollars allocated in the very early days of recovery. Overall elected officials demonstrated that they stood behind Albertans, were willing do to what they could to help, and should be proud of their accomplishments. As one interviewee put it, "the role of elected officials should be to create hope." This is difficult to do if they do not have the requisite understanding of the emergency management system or current and up to date information.

In particular, those who played key roles in the MTF assigned to specific areas were singled out by stakeholders as making a substantial contribution. While this can be attributed to the strength of character and experience of the specific individuals it is also largely because in the MTF and FRTF models there was a system and process to guide their efforts.

The root cause of any friction caused by well-meaning elected officials was a lack of training and awareness regarding emergency management in Alberta, and the systems and capabilities in place. In Alberta, the role of elected officials had not been sufficiently developed to provide them with appropriate guidance, and in the majority of cases this was exacerbated by this lack of experience. It was also noted that some Deputy Ministers also lacked experience in this area. Stakeholders, including the elected officials interviewed, agree that more training and awareness is required and should be included as part of the emergency management program going forward.

The challenge of role clarity and preparation of elected officials and senior civil servants is not unique to Alberta. Various jurisdictions in the United States, as well as some municipalities in Canada, have been working to improve this aspect of their emergency management systems. One of the international stakeholders interviewed stated that, in their view and based on their experience, an elected official that does not know their role in an emergency and has not taken steps to prepare to fill that role is doing themselves and the people they serve a disservice. A summary of key leading practices that the GoA can use to guide enhancement are as follows:

- Elected officials and senior public servants (Deputy Minister) should have their roles clearly articulated. In addition to describing basic roles in emergency plans and legislation many jurisdictions, including California and Strathcona County in Alberta, have developed a specific emergency management guide for elected officials. These guides should be accompanied by ongoing training and awareness – but awareness of the guide and basic roles is not enough.
- Elected officials need to understand more than just the relevant legislation. In order to help them stay at the strategic level during response, elected officials need to be familiar with: the basics of emergency management; ICS; how raw information is managed and assessed; how requests for support are managed; emergency operations centre operations and capabilities; and the details of recovery funding programs.
- Elected officials should also participate in exercises and be given the opportunity to practice their roles and learn how the emergency management system works. California's Golden Guardian exercise program has been very successful in identifying gaps in elected official and senior civil servant emergency management knowledge and as a result a specific training program was developed.

The frustration experienced by some MLAs regarding general information passage could be resolved if the system included a designated MLA liaison and single point of contact within the GoA where elected officials from all parties could obtain sufficient up to date information to help them field questions and issues raised by their constituents. It was recognised that accurate information needs to be available for all elected officials.

3.3.2.7.3 Recommendations

- Basic roles for elected officials should be included in the Alberta Emergency Plan.

- An elected official's guide to emergency management manual should be developed and specific training and awareness sessions should be designed and delivered to elected officials and Deputy Ministers. The guide should include details regarding roles pre-emergency as well as roles during response and recovery. This training should take place as part of on-boarding of new elected officials and Deputy Ministers and annually as refresher training.
- Elected officials and Deputy Ministers should participate in annual exercises with AEMA and become familiar with emergency management operations and Alberta's capacity, POC operations, ICS, and information management.
- A single point of contact or liaison, to field questions from MLAs and provide up to date and relevant information when requested, should be included as part of the emergency management system.

3.3.2.8 Provincial Operations Centre Infrastructure

3.3.2.8.1 Observations

A clearly identified gap in Alberta's emergency management system is the current POC facility and supporting infrastructure. The shortfalls were mentioned by almost every stakeholder who had the opportunity to work in the POC as well as some senior and elected officials interviewed. One industry partner with extensive experience working in the operations centres in other provinces and in municipalities as well as industry went as far as calling the Alberta POC facility an embarrassment. All noted that the facility is far too small and the layout is not conducive to efficient communication and collaboration. The general working conditions are crowded, uncomfortable and contribute to the overall stress associated with emergency management. The current building is old and prone to flooding, as happened during the 2013 flood, and utility failures. In addition, it is not equipped with a proper decisions support and incident management software. The requirement to invest in and develop a new provincial emergency operations was identified as a high priority.

The POC and emergency management partners had difficulties tracking and allocating resources during the flood. This challenge was acknowledged by people in the POC, by municipalities, and by external stakeholders.

3.3.2.8.2 Findings

The importance of emergency management centres, and supporting incident management software, cannot be overstated. At the provincial level, the POC is the coordination facility shared by all GoA and public safety stakeholders. Effective communication, coordination and synchronisation is heavily dependent on the physical size and layout of the POC, and supporting incident management software. In addition, the facility itself must be resilient as the loss of this facility would have an extreme impact on the province's ability to fulfil its role in an emergency.

A comprehensive business case for a new POC was completed in 2011. The business case draws attention a number of the same shortfalls identified in the 2001-2002 Annual Report of the Auditor General of Alberta when assessing the previous POC. The requirements for a new POC are further explained and supported in a submission (Project Number 12231 – Provincial Operations Centre) for the province's 2015-18 Capital Plan.

The City of Calgary invested in and developed a state of the art EOC. The Calgary Emergency Management Agency (CEMA) was fully engaged and led the development of the EOC but costs were shared with different departments. In the Conference Board of Canada's independent review[59], the value and critical importance of the EOC is a key finding. A senior CEMA interviewed as part of this review stated emphatically that Calgary's effective response would not have been possible without their EOC.

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[59] Vroegop, Ruben. (2014). *Forewarned and Forearmed: The Calgary Emergency Management Agency and the 2013 Floods.* [PowerPoint slides]. Retrieved from: http://www.conferenceboard.ca/

While provincial requirements may be slightly different, the Calgary EOC provides a very good model to emulate.

Furthermore, resource sharing would have been facilitated across the province, helping to optimize the allocation and flow of resources, had a resource management system been in place and part of the incident management software.

3.3.2.8.3 Recommendations

- Invest in and develop a new, state of the art POC facility. This can either be a purpose-built facility or constructed in an existing GoA building. The key is that it must be specifically designed to function as an Emergency Operations Centre and have the required physical and IT infrastructure and resilience.
- Implement an incident management software and supporting processes that will better enable situational awareness, information passage, coordinating and tracking of activities and resources, and reporting.

3.3.2.9 GoA Business Continuity Program

3.3.2.9.1 Observations

A key component of the provincial emergency management system is the GoA's Business Continuity Program. As mandated in the Government Emergency Management Regulation, AEMA, in consultation with departments, had ensured that plans were in place to ensure the continued availability of essential services, operations and programs. Planning was done at the department level and the GoA Business Continuity Plan provided the operational framework. With the Cross-Government Co-ordination Team (CGCT) and department CMOs overseeing, supporting and coordinating activities from the POC a sound business continuity structure was in place prior to the 2013 floods.

Overall, the 2013 floods did not significantly impact the effective functioning of the GoA. Resources were redirected to the response and recovery effort, and this necessitated some shifting of priorities and workflow within some departments but overall routine government functions and services carried on for the unaffected areas of the province. However, it is important to note that the floods were a business continuity event for the GoA and business continuity plans were activated and executed. The impact to government services was quickly assessed on the first day of the disaster, no IT systems failed and alternate workspace and offices were sourced and used.

3.3.2.9.2 Findings

The GoA Business Continuity Program framework is in accordance with leading practices as well as business continuity industry standards and proved to be effective during the 2013 floods. However, it is important to acknowledge that the disaster occurred in the southern portion of the province and did not impact Edmonton and the key government infrastructure located there. Therefore, while the structure with the CGCT and CMOs proved to be sound, and the department plans that were activated worked well in the 2013 floods, there is risk in concluding that the overall business continuity program does not require additional work and ongoing improvement. A key point that the 2013 floods demonstrated was the importance of detailed and current business continuity plans at the department and agency level, and departmental/agency staff trained in plan execution.

3.3.2.9.3 Recommendations

- Sustain the current business continuity framework and continue to focus effort toward plan maintenance, training and continuous improvement at the department and agency level.

3.3.3 Emergency Management Capacity

This theme relates to the activities and programs required to ensure that frameworks, structures and plans can be effectively executed at the provincial and municipal levels. Included is: training, awareness, and exercises; Field Officers, regional approach, and municipal capacity building; emergency management in First Nations; staffing levels and capacity; and, contracting service providers.

3.3.3.1 General Observations and Findings

3.3.3.1.1 Observations

From the perspective of the majority of stakeholders, the scope and magnitude of the floods qualified as a 'worst-case scenario' for the province. The 2013 floods provided all levels of government with a real-world example of the capacity required and the lessons learned from the 2013 floods should guide continued efforts to build emergency management capacity.

A significant amount of the data collected from the stakeholder consultations and documentation review links either directly or indirectly to the overall theme of emergency management capacity. Emergency management capacity building is tied to, and mutually supporting with, the Frameworks, Structures and Plans theme, and well as the People Approach and Attitude theme.

An overarching observation was that in situations where an established framework, structure, and/or plan was in place, and people were aware of the details and appropriately trained, overall outcomes were significantly better. An example of this is the Public Safety Governance framework which identified clear roles and responsibilities within the GoA and the assignment of Consequence Management Officers (CMOs). In addition, comprehensive POC SOPs had been developed, training had taken place, and the POC augmentation program was implemented. As a result, overall response within the GoA was effective and considerable improvement was noted since the Slave Lake fire.

In cases where frameworks, structures and plans were developed "on the fly" during the emergency, but training, awareness and exercises were not completed, outcomes were effective but execution was a challenge and placed additional burden on individuals. The best example of this was the development of the recovery framework and the stand-up of the FRTF. The framework and supporting plan helped but, as described in a previous section, there were issues related to clarity of roles and responsibilities, awareness of FRTF mandate and gaps in the training of FRTF members.

In cases where there are no frameworks, structures or plans to train to, and therefore training did not take place, delivering the required outcomes was considerably challenging and only ultimately effective due to the extraordinary efforts of people, their determination and "can do" attitude. It was clear from the stakeholder consultations that a "we will figure it out when needed" approach is not an effective or sustainable model.

Another common observation was the value of relationships and having developed good working relationships prior to an emergency. Almost all of the elements that go into building emergency management capacity also build relationships and this was noted as invaluable during some of the more challenging times of response and recovery.

3.3.3.1.2 Findings

From a GoA and AEMA perspective, and when considering what the Government Emergency Management Regulation states, building emergency management capacity can be viewed as having two (2) areas: building capacity within the GoA; and, facilitating, assisting and setting the conditions for success for capacity building in municipalities and First Nations. The Province has a roll in capacity building activities in both areas.

Much of the work required to sustain and enhance emergency management capacity is relatively low cost, but still requires adequate budget support. Funding will be required for training, awareness, and exercises, as well as focused hiring to ensure an adequate number of Field Officers and staff for other key programs and initiatives. However, equally important to sufficient budget and staff levels is the full and active participation from all groups who are part of the emergency management system and, as was demonstrated by the 2013 floods, emergency management capacity building should be a priority.

3.3.3.1.3 Recommendations

- The GoA should focus on building internal emergency management capacity, as well as developing programs and activities to facilitate emergency management capacity building within municipalities and First Nations.
- Careful consideration should be given before any reduction to the emergency management budget.

3.3.3.2 Training, Awareness, and Exercises

3.3.3.2.1 Observations

In terms of what can be done to increase capacity and ensure better preparedness moving forward, all stakeholder groups were clear – training. A consistent observation was that the response related training provided by the province was very effective and should continue, and training related to recovery should now be a priority. This observation is not surprising because the general frameworks, structures and plans for response were by and large in place prior to the floods and training had taken place. Conversely, frameworks, structures and plans related to recovery were largely developed in detail after the flood had hit.

Stakeholders indicated that training provided by AEMA offers substantial value and confirmed that they applied training undertaken before the flood during the response efforts. Perhaps because training from AEMA is so critical to the overall response and recovery process, many requests for further training opportunities were noted from both within the GoA and in municipalities and First Nations. For example, the majority of provincial government stakeholders indicated that further participation in the POC Augmentation program is needed to increase capacity. For municipalities and First Nations training assistance for specific areas, such as the set-up and operation of reception areas, was a common point.

Training in recovery procedures was provided at time of the event for many GoA staff, most notably the Recovery Coordinators. Although the FRTF did some onboarding training and developed tools such as the transition checklist to guide actions, many municipalities reported being confused about what the province would provide to aid in recovery efforts and GoA staff on the ground struggled to find answers. Many stakeholders indicated that this was inevitable due to the large-scale, unprecedented recovery efforts the province was managing, but also indicated that these inconsistencies should be cleared up through further training.

One of the most timely and meaningful training opportunities administered by the province was Emergency Management Exercise 2013 (EMX 2013), a live operations centre and tabletop exercise staged just months before the flood occurred. The objective of EMX 2013 was to test GoA and AEMA response to a significant emergency event. Many interviewees who participated in this exercise, as well as in the specialized training AEMA provides to municipalities, stressed the value of the exercise and how they leveraged what they learned during the flood response.

Aside from providing stakeholders with an opportunity to practice their plans and supporting procedures for response and recovery, training promotes networking and cross-collaboration. These training opportunities were viewed as essential for building relationships across the province and with external stakeholders. The importance of existing relationships was noted multiple times during the interview process. Prior to the flood, AEMA had established relationships with key stakeholders, industry partners and the Canadian Forces. These personal relationships were viewed as instrumental. In particular, the successful deployment of the Canadian Forces was aided greatly by the established relationships between the military and AEMA leadership.

3.3.3.2.2 Findings

Training, awareness and exercises, both internal to the GoA and within municipalities, are critical components of building emergency management capacity. It is through continuous training and practice on specific procedures, increasing overall awareness, and holding activities to collaborate with partners, share information, and build relationships that emergency management capacity is increased. These activities also help channel and guide the "can do" attitude and good intentions of people that was so prevalent during the 2013 floods and no doubt will also be the case in the future.

In addition to training on specific plans and procedures the focus should be on general awareness and training on key administrative functions. Some of the communication and expectation management issues that arose were due to a lack of general emergency management awareness, training and knowledge of relevant legislation and programs. Elected officials and all government personnel that are in the field representing AEMA and the GoA during response or recovery, including Field Officers and Recovery Officers, must be aware of relevant assistance programs and legislation. Delivery can continue to be provided through on-site sessions delivered by Field Officers or other subject matter experts, through exercises, and leveraging the online training courses available through the Alberta Public Safety Training website.

Overall, while documented frameworks, plans and procedures are essential, they are of little use if people do not know them well enough to execute during an emergency. As was demonstrated during the 2013 floods, training after disaster has struck is extremely difficult. As was well articulated in a post emergency presentation by one of the hardest hit municipalities, during the stress of an emergency people will naturally default to their previous training. Documented plans and procedures are key, should direct and inform training, and be referred to during response and recovery, but the plans are of much less value if people are not trained.

AEMA understands the importance that training, awareness and exercises play in building capacity and continue to work to improve in this regard through activities such as the annual Emergency Management Summit, POC augmentation training, general awareness sessions and the EMX exercise series. The approach of using an annual or bi-annual large scale exercise at the provincial level aligns with best practices. In addition to the large scale exercises there should be sufficient internal training for AEMA in addition to the POC augmentation program. This could include professional development activities such as comparative incident discussions and POC tabletop or process walk through activities.

Currently there is no legislation or mandate for municipalities to conduct an annual exercise, or to have a structured training program, although many do. The 2001-2002 Annual Report of the Auditor General of Alberta mentioned that municipalities should be conducting exercises once every four (4) years. While AEMA reports on this as a performance measure it is outside of the agency's direct control as it is a municipality's decision to exercise or not. Exercising emergency plans every four years is not in line with industry leading practices nor is it sufficient. Other provinces, such as Ontario, legislate municipalities to exercise annually. Municipalities in Alberta should be mandated to exercise either annually or every two (2) years and this requirement should be included in the Alberta Emergency Plan.

3.3.3.2.3 Recommendations

- Training within the GoA should remain a focus and be adequately funded and include, but not be limited to:
    - ICS training
    - POC Augmentation training
    - Recovery training
    - Annual or bi-annual provincial multi-jurisdictional exercises
    - Annual or bi-annual municipal / First Nations exercises
    - Summits and workshops
    - Specific training for elected officials and Deputy Ministers
    - General awareness sessions on the emergency management system for all GoA staff
- Conduct a Training Needs Assessment in all municipalities and First Nations. Based on the needs identified, provide training assistance through subject matter experts, funding grants or advice

3.3.3.3 Capacity Building at the Municipal Level

3.3.3.3.1 Observations

While municipalities are primarily responsible for emergency management within their jurisdiction, the province has a responsibility to facilitate and help with capacity building. In addition to the training aspect previously discussed, two other key areas where the province can assist with capacity building and provide value at the municipal level is through the Field Officer program and supporting the overarching concept of regionalisation for emergency management.

The value of Field Officers was viewed from two perspectives, both of which speak to enhancing emergency management capacity. First was the value of Field Officers when it came to planning, training, ongoing advice, and general assistance connecting with the GoA prior to an emergency. The second value was during the response where the Field Officer on the ground was able to assist with obtaining resources and facilitating communications with the POC and the wider GoA.

AEMA did not have enough trained staff to deploy a Field Officer to all affected areas, and nor can that be expected when a disaster is as wide spread as the 2013 floods. With respect to the existing Field Officers, communities reported that when they had developed relationships with local stakeholders and understood the community's specific environment, the Field Officers provided incredible value and simplified interactions with the province. Communities that did not have a designated Field Officer or had not established relationships with their Field Officers reported a higher level of difficulty communicating with and obtaining resources from the province. Regardless of their experience during the 2013 floods, municipalities felt that an increased number of Field Officers would be beneficial moving forward.

In 2011, the Emergency Management Act was amended to support local authorities establishing regional approaches to emergency management. Many municipalities such as Medicine Hat, Redcliff, and Cyprus County, as well as the Mountain View County have taken positive steps towards a regional approach and have noted the benefits. The larger municipalities in Alberta have substantial emergency management capacity, mature programs, and stated that they welcome any and all opportunities to assist smaller municipalities.

Stakeholders indicated that the capacity and expertise delivered through the use of Incident Management Teams[60] (IMTs) was an essential contributor to successful response efforts. These all-hazard emergency management teams were comprised of experienced personnel from non-impacted municipalities and other organizations and their purpose was to assist with response and recovery activities in the hardest hit municipalities.

Many municipalities expressed an interest in formalizing a regional approach as well as leveraging the IMT structure. The benefits were clearly identified and include enhanced logistics capabilities, resource sharing, joint training opportunities, a shared EOC facility, and increased staff at time of disaster. Those that have already taken steps towards a regional approach, and have regional agreements, spoke very highly of the arrangement. It was noted and needs to be stressed that IMTs reinforce communities and must work to the guidance of communities elected leadership and Directors of Emergency Management. At no time should IMTs completely take over response and recovery efforts.

3.3.3.3.2 Findings

The value of Field Officers and their ability to assist with capacity building is clear. AEMA has been focusing on building Field Officer capacity and capability since the 2013 floods. A number of additional staffing positions have been created to develop capacity by increasing the number of trained Field Officers. Since the 2013 floods the number of AEMA Field Officers has increased from nice (9) to 18. Additional Field Officer positions were initially temporary contract positions but this should not be the case going forward. Ensuring that the additional Field Officers are transitioned from two-year, temporary contracts to permanent positions should be a priority as their value to municipalities has been clearly demonstrated.

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[60] http://www.aema.alberta.ca/documents/ema/D5_Incident_Management_Teams_and_Regional_Partnerships.pdf

In addition, it is important that field officer rotation be limited as much as possible. This is supported by the jurisdictional review and a personal interview with a U.S journalist and correspondent with extensive emergency management experience and whom was intimately engaged in the Hurricane Sandy relief efforts. It was noted that frequent changing of FEMA representatives resulted in communications issues, at times in duplication of efforts, impeded overall coordination and damaged FEMA's reputation.

The IMT structure has been used to successfully respond to disasters throughout the world. IMTs operating under the United States' Federal Emergency Management Agency (FEMA) have been deployed to respond to international disasters, such as the 2010 earthquakes occurring in Chile and Haiti. The province has already begun to encourage municipalities to establish IMTs as well as develop regional mutual aid agreements and a regional approach. The GoA is demonstrating support for this structure by offering grants for the regionalization of emergency management. The GoA also recommends that municipalities formalize their IMTs by developing regional EOCs and plans, and exercising these plans together. For their part, municipalities appear to support the shift towards regionalization. As one participant put it, "The days of each municipality being a stand along entity with their own plan should be over. In Alberta we have to work together – we could be in a position to deal with major events in a better way if we work together."

3.3.3.3.3 Recommendations

- It is recommended that the Field Officer program remain a priority. This program should be adequately funded and individuals selected to be Field Officers must receive the requisite training and rotation is minimized to the extent possible.
- It is recommended that the GoA continue with grant programs that facilitate the regionalization of emergency management.
- In order to fully leverage the benefits of the IMT structure, details and clarity surrounding general terms of reference, command and control structure and deployment should be documented and included as part of the Alberta Emergency Plan and/or clearly determined before an IMT is deployed.

3.3.3.4 Emergency Management in First Nations

3.3.3.4.1 Observations

Two of the three Aboriginal communities impacted by the flooding, Siksika Nation and the Stoney Nakoda Nation, indicated that the province's willingness to assist during and after the event was greatly appreciated. They viewed the POC as highly effective, and the response from the provincial government was fast and largely influential on-reserve. The Field Officers and AEMA staff on the ground had an understanding of emergency legislation, which allowed them to be effective during the event; however, for the most part the communities were unaware or unclear on the legislation, which led to confusion regarding the roles and responsibilities of the various parties involved.

Complications arose during the transition from response to recovery when clarity regarding the roles and responsibilities of various agencies was required to foster effective communication and actions. The confusion regarding the roles, responsibilities and authorities of the provincial and federal governments during recovery created communication issues between the two government bodies as well as between the government bodies and the communities. As a result of the communication issues, the impacted communities would often be provided with conflicting or inaccurate information from multiple sources.

GoA staff turnover was counter-productive during both the response and recovery. When new provincial government staff members were sent to the communities they often experienced a significant learning curve, as well as confusion over who was the appropriate contact for specific areas. This situation was compounded when the Field Officer was no longer in place to help coordinate communications. The communities indicated that during recovery new provincial staff were often placed on the ground without proper introduction to the community administration, which created confusion and a lack of confidence between the communities and the provincial government.

Regarding emergency management capacity, the impacted First Nation communities were at various degrees of maturity with respect to their programs. Response capacity was noted as being more advanced and generally more straightforward. In terms of recovery, the situation in First Nations was more complex as it included federal involvement as well as provincial involvement. All communities indicated a desire to further enhance their emergency management skills and capacity.

3.3.3.4.2 Findings

Facilitating capacity building in First Nations is not substantially different than what is required in all municipalities. It still is underpinned by Field Office participation, assistance with training, access to funding and general advice and guidance.

The communities included in the consultations vary in population and land base, and were affected to varying degrees by the flooding. Some of this variation can be attributed to the nuances within each community both politically and socially; these nuances call for an individualised approach to emergency management. Stakeholder consultations findings demonstrate that there is not a one-size-fits-all solution to emergency management on-reserve and that the province will need to work collaboratively with each Aboriginal community in Alberta to develop an emergency management plan that suits the individual community's needs.

Similar to municipalities, in cases where Field Officers, government representatives, and other support sent staff had developed pre-existing relationships with the community administration and members, the stakeholders generally had increased levels of trust and experienced enhanced communication during the response and recovery periods. It is important to note that an understanding and basic knowledge of Aboriginal culture is critical for Field Officers and Recovery Coordinators deployed to First Nations communities.

3.3.3.4.3 Recommendations

- It is recommended that the First Nations Field Officer program remain a priority and an area of focus. Individuals selected to be Field Officers must receive the requisite cultural training and build relationships with the communities. In addition, these Field Officers must also be fully aware of the different provincial and federal funding sources for emergency management.
- It is recommended that the First Nations Field Officers also act as Recovery Coordinators for the recovery phase.
- First Nation Field Officers should undertake emergency management program development and training needs assessments with their respective First Nation communities and help each community build a roadmap to drive capacity building and continuous improvement.

3.3.3.5 Staffing Levels and Capacity

3.3.3.5.1 Observations

The lack of staff capacity and resources available to respond to and recover from the 2013 floods was noted during the majority of stakeholder consultations. Stakeholders acknowledged that the province mounted a largely effective response considering the resources they had at their disposal. Due to the time of year and magnitude of the flooding, as well as the requirement to maintain normal operations within the GoA, the number of provincial government workers available for response efforts was limited.

Within the GoA, staffing was difficult because of the complexity and length of the flood. While the staff seconded demonstrated a "can do" attitude and willingness to help, oftentimes they did not have the required experience or expertise. In addition, the practice of rotating staff members caused a number of challenges, including the requirement to continually re-train seconded GoA staff.

AEMA staff resources in general and those personnel from ministries that worked in the POC were stretched to the breaking point. Stakeholders interviewed noted that AEMA is staffed to sustain Level 4 activation for approximately 72 hours and then the POC Augmentation program is activated. Considering that Level 4 activation was sustained for 24 days, both the regular POC staff from AEMA and GoA ministries and the POC augmentation program were placed under significant stress. Within ministries supporting the POC with only two (2) trained CMOs these individuals were often asked to fill twelve (12) hour shifts on a 24/7 basis. This was noted as being both unfair and unrealistic.

Within the FRTF there was initially a lack of dedicated support staff to help manage the day to day needs of the Task Force. This included communications, information technology, human resources and administrative team members. These issues are well-articulated in the FRTF Lessons Learned review and are addressed in the draft ROM.

3.3.3.5.2 Findings

It is unrealistic to approach challenges related to staffing levels solely by hiring more people. While it is true that additional staff and contractors were required during the height of recovery efforts, issues regarding staff capacity are more than just staff numbers. Additional capacity building measures are required to ensure effective response and recovery.

There will always be staffing level and capacity issues during any large scale emergency. The solution lies in targeted hiring of individuals for key areas such as Field Officers and DRP management. In addition, these challenges can be mitigated by building emergency management capacity and skills through the training of existing staff. If each ministry had three to four trained CMOs it would assist greatly. Also, considering the vital role training plays in capacity building within the GoA, municipalities and First Nations, it is essential that AEMA has the required staffing to plan, coordinate and implement training programs.

The GoA is proactively working on solutions to mitigate the broader issue of staff capacity. AEMA is working to expand the POC augmentation program, and the recently completed draft ROM outlines a number of required positions that were not formally documented prior to the 2013 floods. If training in both these areas is undertaken proactively to build internal expertise and develop the skillsets amongst a larger number of GoA employees, issues related to staff capacity at the provincial level should be improved. The GoA Business Continuity Program also supports increasing capacity for as departments who have staff seconded to response and recovery can implement portions of their business continuity plans to determine how to continue providing services with reduced staffing. Many of the processes in place are well-developed, the focus now has to be on developing greater bench strength in the event of a future complex, prolonged disaster.

Prioritisation of effort is also a key consideration when there are staffing level and capacity challenges. In the past there are good examples of AEMA and the GoA sequencing and prioritising projects. Following the Slave Lake fires AEMA correctly focused on developing the Public Safety Governance frameworks, improving POC operations, growing key areas and developing and then training on POC standard operating procedures (SOPs). A revision of the Alberta Emergency Plan was an identified requirement but assessed as not as urgent as other items. The response to the 2013 floods demonstrated that this prioritisation of efforts was correct.

3.3.3.5.3 Recommendations

- Continue to develop and deliver emergency management training to GoA staff for the purpose of increasing bench strength that can be called upon during an emergency. This includes but is not limited to training additional CMOs within each ministry with the goal being to have four (4) ready at any time to support the POC, emergency management operations, and/or business continuity.
- The hiring of additional staff should be targeted and focused on high-priority capacity building positions such as AEMA Field Officers, personnel to plan and implement training and staff for key recovery positions.

3.3.3.6 Contracting External Service Providers

3.3.3.6.1 Observations

As to be expected with a disaster the size of the 2013 floods, the GoA contracted various service providers and specialists to assist with response and recovery. In particular during recovery construction related services were required. Although it worked well enough in the end, the sourcing and hiring of contractors took time and contract management required a concerted effort. In addition, some municipal and First Nations stakeholders interviewed raised concerns about the overall fairness of the GoA's contractor hiring process and would have liked more opportunities for local businesses to be engaged.

3.3.3.6.2 Findings

The need for additional capacity and resources is a common element with almost all disasters, regardless of their size. While working in collaboration with emergency management partners from industry and other levels of government are a critical component, there will always be a need for external private sector service providers.

A common lesson learned from other major disasters in the United States and Australia, as well as previous disasters in Canada, is the value of having standing offers and pre-qualified vendors in place prior to the disaster event. Although it is impossible to foresee all potential services that may be required, and emergency procurement will always have to take place, vendors for certain large scale services can be pre-qualified and placed on a standing offer/vendor of record list. These services can include temporary lodging, building damage assessment, construction and food services.

In other jurisdictions having pre-qualified vendors on a standing offer/vendor of record list were found to not only expedite the contracting process and assist with contract management, but also helped manage any perceptions of fairness in the contracting process.

3.3.3.6.3 Recommendations

- Using existing procurement processes, the GoA should pre-qualify vendors and create a standing offer/vendor of record list for emergency management response and recovery services to include, but not limited to:
  - Temporary accommodation
  - Construction services
  - Building damage assessment
  - Food services
  - Transportation (vehicle rental, bus service etc.)

3.3.4 Communications

The theme of Communications includes the passage and flow of information: within the GoA; from the GoA to municipalities and First Nations; and from the GoA to the public.

3.3.4.1 General

3.3.4.1.1 Observations

The effort required to coordinate the flow of information during an event like the 2013 floods is a challenge and this was recognised by all stakeholder groups. Common questions around situational awareness, appropriate contact points and communication processes were noted. The jurisdictional review confirmed that these communications issues are a constant in almost all disasters and is a particular prevalent theme for large scale disasters.

Although gaps and areas for improvement were identified, overall, stakeholders rated inter-agency, inter-governmental, and public communications as Effective, but there were clear points of frustration and noted areas for improvement. It should be noted that many stakeholders commented that communication had improved significantly during the 2014 floods, and that it is clear that the province has already added more structure to their processes.

3.3.4.1.2 Findings

A key finding from the review was the link between communications and the other themes. Where frameworks, plans and procedures were in place, and people were trained in their use, communication and information passage was quite effective. In situations where these underpinning elements were not in place there were communication challenges. Therefore, the path to improved communication is to provide the appropriate frameworks, plans and procedures, and then ensure that all involved are aware of them and practiced in their use.

3.3.4.1.3 Recommendations

- To improve communications, it is recommended that focus be placed on items within the other themes: development of appropriate frameworks, plans and procedures, and ensuring all involved are trained and aware of the procedures.

3.3.4.2 Communications within the GoA

3.3.4.2.1 Observation

Communications within the GoA were effective considering the volume of incoming information, the challenge of synthesising and analyzing this information, and the outdated incident management system in the POC. The fact that the Consequence Management Officers in the POC were well trained and engaged helped with information passage within the GoA, as did the delivery of various updates and the Common Operating Picture Report (COP-R). Key issues were noted with the overall information management system in the POC and with information and data sharing. A root cause was the SharePoint based system used in the POC was complex for users and did not meet the demands.

Communications within government started to become an issue with the stand-up of the FRTF and initial confusion regarding roles and responsibilities. The MTF and FRTF models were effective in ensuring that Ministers were by and large kept abreast with recovery operations. A system was in place that had ADMs updating their DM and this was similarly effective. However, as previously noted some of the elected officials interviewed felt that they were not being kept informed and did not know where to go for information during both response and recovery.

3.3.4.2.2 Findings

Training and following the established SOPs within the POC assisted with overall inter-governmental information passage and communications. In the first 36 hours of response, information management was extremely difficult due to the volume and pace of change. However, by executing the SOPs and processes in place, the situation improved.

The establishment of the MTF and FRTF helped to ensure effective communication at highest levels of provincial government. Communications issues that stemmed from clarity around roles and responsibilities when the FRTF was initially formed are understandable considering it was a new structure. The development of the ROM and ongoing training efforts will mitigate these issues for the future.

As previously noted, elected officials have a role to play and require information which they can use to help inform their constituents. Consideration should be given to having a MLA liaison officer or a central point of contact where MLAs can obtain updated information.

3.3.4.2.3 Recommendations

- It is recommended that the province procure and implement an effective emergency management software system in the POC in conjunction with supporting processes.
- It is recommended that crisis communication specialist training be provided to PAB staff who work as part of the POC.
- The province should consider designating a single point of contact or liaison, to field questions from MLAs and provide up to date and relevant information when requested.

3.3.4.3 Communication with Municipalities and First Nations

3.3.4.3.1 Observations

Due to the scope of the floods, gaining situational awareness and then communicating the relevant information within the GoA and to affected communities and the public was an extreme challenge in the first 36 hours. Once AEMA was able to gain a degree of control over the volume of information, communications with municipalities and First Nations improved as SOPs kicked in. However, improving situational awareness, and shared situational awareness, as well as general information flow and tracking was a noted area for improvement.

There was a direct correlation between municipality and First Nations views of communication with the GoA and the presence of Field Officers in these communities. For locations with a designated Field Officer, communications and information passage was more effective. For municipalities where a Field Officer was not present, or was not provided with adequate information, there were communication challenges and frustrations for municipalities and First Nations.

Stakeholders mentioned there was initial confusion around contact points once the FRTF was activated, which led to some duplication of efforts and inconsistent messages. Despite these issues, stakeholders noted that the FRTF was implemented efficiently and overall the communications around the recovery process were handled well – with the exception of the DRP as it relates to individual claimants.

3.3.4.3.2 Findings

The province has begun addressing shortfalls and gaps by hiring additional Field Officers and providing them with additional training. The presence of additional Field Officers will provide municipalities with a single point of contact for communications, which the majority of municipal stakeholders support.

Issues related to information management, situational awareness, the production of different and more effective communications products are currently being address. AEMA is in the process of procuring a new incident management solution for the POC which should help improve communications both within the GoA and with municipalities and First Nations.

Completing the rollout of the ROM, to include training and awareness, will also help to resolve communications issues in the early stages of recovery.

3.3.4.3.3 Recommendations

- Implement an effective emergency management software system in the POC
- Ensure sufficient Field Officers are available and understand their roll in facilitating communications
- Implement the ROM and ensure the requisite training and awareness takes place

3.3.4.4 Communication with the Public

3.3.4.4.1 Observations

Overall, crisis communications and communications to the public from the GoA were assessed by stakeholders as effective. Communications from the GoA to the public flowed through two (2) primary channels. One channel was from the Public Affairs Bureau (PAB), who received updated information and agreed upon common messaging with the POC. The second communication channel to the public was through elected officials. Procedures were implemented in the POC to ensure that the required key messages were developed. Adjustments were made within the POC to ensure sufficient staff from PAB were embedded in the POC and received current and accurate information for communication to the public and for elected officials. Communication to the public through elected officials improved as the situation progressed and messages were more closely aligned with the POC and FRTF.

To help address the specific communications challenges in High River, the GoA communications staff were proactively dispatched to High River to assist in coordinating GoA communications efforts with the Town and to reinforce the Town's efforts in this area.

3.3.4.4.2 Findings

Timely and accurate communications from the GoA to the public during any emergency is a critical. As was learned during the 2013 floods, communication during a crisis of this scale and scope requires a degree of specialisation for those communication professionals tasked with the job. PAB staff need to have these specialised skills, ensure they have an adequate number of people trained to manage a prolonged event, and be fully integrated with POC operations. Although communications to the public was effective overall, as a best practice PAB staff would benefit from specific crisis communications training, integration with elected officials and continued participation in all POC training.

3.3.4.4.3 Recommendations

- Provide crisis communications specialist training to PAB staff who works as part of the POC
- Provide emergency management training to elected officials and consider designating a single point of contact, or liaison, to field questions from MLAs and provide up to date and relevant information when requested.

3.3.5 Continuous Improvement

This theme consists of: improvements made between 2011 and 2013; ongoing improvement initiatives; and, the requirement to maintain momentum.

3.3.5.1 Improvements 2011 to 2013

The province demonstrated a clear commitment to emergency management in the period 2011 to 2013 and undertook efforts to improve its response and recovery capability. Prior to the 2013 flood, the Slave Lake Fires of 2011 were the costliest disaster to ever impact the province and made media headlines due to the speed of onset and severity of the disaster[61]. The province learned some key lessons from this disaster and acted on these lessons.

As large and tragic as the Slave Lake fires were, by comparison, they were considerably smaller in impact and less complex than the 2013 floods. Many interviewees commented that if the province's response and recovery capability had not improved in the manner which it did between 2011 and 2013 the overall outcomes for the 2013 floods would not have been nearly as positive.

Major improvements completed prior to the 2013 floods include, but are not limited to the following:

- Development of Public Safety Governance
- Increase to staffing and capability within AEMA
- Enhancements to POC operations and the development of SOPs
- Implementation of ICS
- Development and implementation of the POC augmentation program
- Improvements in inter-ministerial and inter-agency cooperation, driven largely by the Public Safety Governance and through training and exercises

Had these initiatives and actions not been completed, the GoA would have had significantly more challenges responding to the 2013 floods.

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[61] "Canada's Top Ten Weather Stories for 2011: Slave Lake Burning." Environment Canada. June 19, 2013. Retrieved from: https://www.ec.gc.ca/meteo-weather/default.asp?lang=En&n=EE2A47F9-1

In addition to taking specific action prior to the floods there were also a number of lessons learned that had yet to be formalised or completed but were leveraged and used "on the fly". Clear examples of this are: procedures and actions related to housing displaced people; the recovery framework, MTF and FRTF models, payments cards; and a number of other items related to recovery including authorization and early distribution of funds, and significant flexibility related to how funds were spent.

3.3.5.1.1 Findings

Overall improvement to the Alberta emergency management system between 2011 and 2013 were noteworthy. The same general process used to action the recommendations made following the Slave Lake fires is now well underway for the 2013 floods.

Some areas for improvement noted following the Slave Lake fires have not been fully addressed and should be as a priority. Notably, this includes the development of a framework to coordinate delivery of emergency social services. The fact that this had not been completed was identified as causing confusion and coordination issues during the 2013 floods. The Alberta Emergency Management Plan has not been updated since 2008, although the impacts of this are minimal due to the improvements within the POC and an updated plan is near completion.

3.3.5.2 Ongoing Improvement Initiatives

3.3.5.2.1 Observations

GoA ministries, as well as municipalities, First Nations and NGOs, have completed a significant number of after action reviews and reports. Efforts for continuous improvement and capturing lessons learned is evident in all areas and, at the provincial level, AEMA has made this a priority. Several ministries and agencies have completed after action reviews, key areas for improvement have been identified and work is ongoing to effect the required changes. At one point AEMA was tracking and managing a total of 176[62] different post flood action items.

Additional areas that were not identified prior to the flood have been given specific focus. A clear example of this is the DRP and the ability to effectively and efficiently manage the number of claims submitted. Another example is the improvements projects currently being undertaken by the province's River Forecasting Centre (RFC). These projects are focused on both improving awareness of RFC services and communication with stakeholders across the province, as well as improving the technical capabilities of the RFC. Additionally, the province declared the first-ever Provincial State of Emergency for the Town of High River. As the severity of the flood increased, it became clear that there was no established process for declaring a Provincial State of Emergency. Further, there were no set procedures on the required actions following such a declaration.

3.3.5.2.2 Findings

Since the 2013 floods the province has identified and actioned a number of lessons learned and implemented key improvements. For example, the province has made updates to the Emergency Management Act to formalize the declaration of a Provincial State of Emergency. However, further work needs to continue around the development of the processes and procedures that are designed to operationalize the Provincial State of Emergency.

Overall, progress is impressive and all involved should be proud of the pace and scope of improvement. While the progress is noteworthy there is still a considerable amount of work to be done and it is critical that momentum be maintained. Based on the success of response and recovery from the 2013 floods, and the known areas for improvement (many of which are well-known by the public) stakeholder expectations for "the next time" are very high. Areas for improvement have been identified, and many are in the process of being implemented. It is essential that they be followed through to completion.

Just as the experience from the Slave Lake fires provided a catalyst for improvement, lessons from the 2013 flood can help bring Alberta's emergency management system to the next level.

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[62] Initiatives Master Spreadsheet, Department of Municipal Affairs, 2014

3.3.5.2.3 Recommendations

- It is recommended that the ongoing efforts to improve various aspects of the emergency management system remain a priority and be followed through to completion. Priority consideration should be given to the following:
    - Redevelopment of the DRP
    - Addressing those key items noted in the Slave Lake after action review but not fully completed
    - Documenting and formalising procedures and processes that were developed at time of disaster
    - Addressing items identified in this report as well as the numerous after action reports completed by ministries
    - Developing a process for declaring a Provincial State of Emergency and procedures for actioning this process

3.4 Stakeholder Observations by Review Objective – "What We Heard"

3.4.1 Overview

The following section provides a summary of observations, and "what we heard", from each of the stakeholder groups. Not all stakeholders were able to provide input relative to each of the objectives. Additionally, some of the stakeholders' views with respect to the objectives or specific events during the flood varied and are not necessarily consistent, as they are highly dependent on the stakeholders' own experiences.

All stakeholders consulted with were engaged and appreciated the opportunity to provide input. Their input was synthesised and included in the analysis. It is important to note that while most stakeholder groups identified had no difficulty identifying areas for improvement, when asked overall how they felt the Government of Alberta did in each objective area and overall, they rated almost always gave a rating of effective.

3.4.2 Interagency Emergency Response and Coordination

3.4.2.1 Aim

The aim of this specific objective was to review the goals, timelines and coordination of provincial disaster and emergency response departments and agencies' response-related activities, as well as the provincial coordination and interaction with other response agencies during the response phase of the event. This objective incorporated a review and analysis of the legislation, policy and governance structures in place to guide interagency coordination, including the mandate of participating agencies and whether or not there was a clear delineation between each agency's roles, responsibilities, authority and accountabilities.

3.4.2.2 Observations

3.4.2.2.1 General

Stakeholders rated the GoA's overall approach to interagency emergency response and coordination as effective.

3.4.2.2.2 AEMA and Flood Recovery Task Force

The AEMA officials interviewed predominantly thought the province was effective at coordinating response-related activities both within the government and with external stakeholders. In addition to their commendation, they identified a number of areas where improvements could be realized.

One measure singled out for praise by a number of the AEMA officials interviewed was the POC's augmentation program. Run across all provincial government ministries by AEMA in 2012, the program succeeded in training a number of GoA employees and other personnel, which allowed the POC to boost its capabilities during the flood by bringing in trained staff. The program also produced another POC Director, who helped with shifts and workload during the floods.

When it comes to the nerve centre of the government's response, the AEMA officials interviewed were in agreement: Alberta needs a state-of-the-art POC. There are a number of infrastructure shortcomings with the current facility, including the lack of fire suppression and aging electrical systems. Another issue that should be addressed is that the decision support software used by the POC does not meet needs.

During the course of the flood, the POC developed, maintained and communicated the common operating picture. The Common Operating Picture Report played a crucial role in this endeavour, as it contained almost everything that officials needed to drive communications (e.g. key messages, schematics, the previous 24-hour reports). The biggest challenge was that the information amassed quickly, and it was hard to condense given the sheer number of sources contributing. In order to facilitate greater information sharing during future events, AEMA officials suggest that the COPR should be distributed to all affected communities.

Prior to the flood, AEMA had established relationships with key stakeholders, industry partners and the Canadian Forces. While many of these connections were due to previous training exercises, the strongest relationships were the ones AEMA staff had developed prior to working for the provincial government. These personal relationships proved critical in a number of instances, particularly the successful declaration of a Provincial State of Emergency in High River and deployment of the military.

Just months before the flood hit, a full-scale training exercise, EMX13, was staged. AEMA officials stressed the importance of such exercises, arguing that all provincial employees involved in emergency response could benefit from more training.

Since the 2013 floods, the province has encouraged those municipalities that have not done so already to adopt ICS. The province is incentivizing ICS adoption by aligning all emergency management planning tools with ICS, offering ICS training to municipalities and designating ICS compliance as an eligibility requirement to receive Emergency Management Training grants under the FSEPP.

In terms of communications, while AEMA and FRTF considered the overall effort a success, there were areas that could have been improved. While the Consequence Management Officers from each ministry were well-trained and engaged during the response, at times they had difficulties receiving and passing along information. Communication issues also arose as a result of AEMA's inability to effectively translate the highly technical information received from the River Forecasting Centre (RFC). This led to stakeholders directly contacting the RFC for information as opposed to going through the POC. There was no pre-set time for updates from the RFC, and no communication regarding why the updates would be made at that time. Within the government itself, communication could have been improved by sending fewer, more focused updates.

The AEMA officials interviewed were divided as to the quality of the crisis communications during the flood, which was handled by members of the PAB who had been embedded in the POC. While some officials argued the crisis communications aspect of the response was strong, particularly the development of key messages, others insisted that the PAB requires further training in crisis communications capabilities moving forward.

The contribution made by the province's elected representatives was helpful in many instances, and was a hindrance in others. However well-intentioned, elected officials often complicated matters by communicating conflicting or incorrect information or in some cases made promises that they did not keep or that were unrealistic. It was noted that in the future, it would be helpful if politicians managed rather than inflated expectations.

The legislation is largely clear and well understood by key provincial personnel. While the act compels municipalities to do such things as develop an emergency management plan and appoint a director of emergency management, it does not require them to complete a risk assessment or a conduct an annual training exercise. Both of these components, according to a senior official, should be included in the legislation. There is some precedent for this: an Auditor General report from 2001-02 required communities to conduct exercises once every four years. The report, however, has no legal standing, although one of the AEMA's performance metrics looks at how many communities exercise their plan, at a minimum, every four years.

The successful coordination through the POC of the various agencies was an integral component of the response and recovery effort. In particular, AEMA officials highlighted the contribution made by the Canadian Forces. Although there was initially concern about the visibility of soldiers in affected communities, they were necessary, particularly in High River, given the magnitude of the flood. As opposed to alarming the public, which was the fear in some areas, the military actually had a calming influence and boosted morale. One agency that lacked a presence during the flood, according to the AEMA officials, was the federal department of Public Safety. Although the department set up an access number for assistance, it did not have the necessary resources to send a representative to the POC on a full time basis, an absence that was felt.

3.4.2.2.3 Municipal Observations

Seventy-five percent of the municipalities that chose to offer a grade rated the response-related activities of the province and its coordination with other agencies as either "effective" or "highly effective." The Ministerial Task Force was singled out for praise by a number of communities. The government's decision to appoint three associate ministers responsible for regional recovery and reconstruction was also commended.

The municipalities' experiences communicating with the province were mixed. While many reported having a direct line of communication to the POC, a number of others were not as fortunate. These communities either had to contend with multiple points of contact, ever-changing Field Officers, or Field Officers that were unable to provide required information. Communities' perceptions of the quality of communication depended a great deal on how supportive they found their Field Officer to be. The indispensability of an effective single point of contact – or how harmful its absence was in the case of some communities – was a point that was stressed time and again. There is also a need, in the opinion of some municipalities, for better communication between the province and the federal government in cases where infrastructure spans jurisdictions.

The pre-existing relationships municipalities had with provincial officials played a critical role during the response and recovery. Those communities with strong contacts already in place found it easier to plug their EOCs into the POC. Municipalities that hadn't fostered such relationships, on the other hand, struggled. The relationship a community had with its Field Officer was particularly important.

The municipalities said they would also like to see the province offer more comprehensive training courses, which would allow their officials to acquire some much-needed emergency-management skills and build relationships with key provincial staff. The training exercises that currently take place centre on the municipality's role in an emergency. While this is obviously important, it would be helpful to have a better understanding of what the POC is, how it works, and how it can support a community's response during a crisis.

The Emergency Management Act was a source of conflicting opinions. Some municipalities found it clear and effective, while others said it was confusing and inadequate. Suggestions on how to enhance the Act were offered by both its supporters and critics. For instance, one proposal was to add "some teeth" to the act to prevent complacency and improve preparedness. Another suggestion was to make the act more objective based in order to better standardize emergency management across the province.

Information sharing was another challenge. Some communities reported being overwhelmed with the amount of paperwork the province sent, as well as being inundated with multiple requests for the same information from different sources. Another reported irritant was the variety of file hosting services used (e.g. Dropbox, File-zilla), with communities often having to upload the same file to a number of different systems.

While many communities found the information provided by the RFC exceptionally helpful, the experience of others was not nearly as positive. They complained that communications from the RFC were not well coordinated, that the updates were given at inconsistent intervals, and that the language used by the facility was difficult to interpret. For instance, it would have been helpful to have practical examples attached to the technical forecasts. Other municipalities reported receiving information that conflicted with what they were being told by their dam operators. In some cases, these differences were substantial. In one case, the difference between the two reports was 2300 cubic meters per second.

The municipalities were mixed as to whether the POC was effective at coordinating resources. While many had no issues procuring what they needed, others argued the POC did a poor job of matching resources to needs. It was suggested that the province should work with the municipalities to register their resources to ensure more efficient deployment during future disasters. It would be important for the province to make clear, however, that only resources released by the municipalities would be used, thus relieving fears that the province could commandeer supplies at will.

3.4.2.2.4 Government of Alberta Ministry Observations

Overall, the coordination of the response efforts was viewed to be effective. The government activated the POC and brought in the right people with the right expertise (e.g. housing, transportation, policing). Each of the departments involved had a mandate and was largely clear as to its role and responsibilities. Given the size of the response and the number of players involved, there were, unsurprisingly, some areas where improvements could have been realized. While communications were generally good, there were times when what was happening on the ground was not being well communicated. There were issues providing information to the incoming shift at the POC. In terms of external communications, the PAB could have benefited from more training on crisis communications.

The province did not have an established procedure for awarding contracts to service providers in an emergency situation. Even though there may have been a host of experienced contractors prepared to provide services, the ones who were chosen were often those who had contacted representatives in the ministry.

There was a need identified for better information and data sharing. Time and resources were often wasted through the duplication of efforts. Municipal Affairs, for instance, established its own operation centre to gather the names of evacuees, which was something the Red Cross was also doing. A centralized database would have made the same evacuee information available to the various ministries, programs, and NGOs.

The electronic tracking system was not widely used or understood. As a result, information arrived through a variety of avenues, which led to numerous tracking and resource coordination challenges. A number of interviewees expressed dissatisfaction with the Sharepoint system used in the POC, arguing it was ineffective communication tool. Not infrequently, orders would get lost, so frustrated staffers would instead make their requests in person, over the phone, or through email rather than through the system.

While the whole-of-government approach was by and large a success, there were areas where cooperation could have been improved. Although roles and responsibilities were largely clear, the scope of these roles was not always so. As a result, there were cases where two separate logistics people were addressing the same issues. Although a significant asset to the recovery effort, the FRTF also caused a degree of confusion. Interviewees claimed its unclear role and responsibilities led to many instances of duplication of effort. These claims are not unexpected due to the nature of scope of the floods, and the FRTF has addressed many of these issues in their recent ROM. This manual is intended to serve as a guide to GoA efforts to enable effective community recovery. The detailed authority lines, Task Force roles and corresponding responsibilities laid out in this manual are expected to mitigate duplication of efforts and confusion in future disasters.

3.4.2.2.5 First Nation Observations

While the impacted First Nations communities indicated that the POC was highly effective during the event, clarity was required by the communities regarding the roles and responsibilities of the various individuals and groups within the provincial government. The communities' administration and staff were not clear on which Provincial department or individual was appointed to assist them in certain areas of the transition and recovery, leading to confusion during the recovery coordination.

One community indicated that the POC was effective in coordinating the provision of supplies and resources to the community during the response and transition to recovery, yet another community indicated that there were insufficient provincial resources delivered to the community. Overall, the First Nations communities interviewed indicated that the Field Officers on the ground during the initial response were effective and had the appropriate level of knowledge and training to assist the communities with the disaster.

In Manitoba, an after-action report from the 2011 floods revealed findings consistent with the information gathered during this review. Namely, the importance of strong relationships and a community-focused recovery effort. Best practices also suggest that the strategy of designating a key contact or point person for First Nations communities is essential. Alberta has had dedicated First Nations Field Officers since 2011, all of whom also provide training to First Nations communities. First Nations stakeholders interviewed indicated a direct correlation between this training and their capacity to respond to the 2013 floods. In particular, the recent provision of reception centre training was cited as being of practical use during the response efforts.

After action reviews from other provinces have indicated that First Nations communities have reported not having the level of access to training or dedicated resources with emergency management expertise assigned to work with their communities as Alberta provides. Specifically in New Brunswick, a key recommendation from the Perth-Andover Flood Mitigation Report, released in 2012, indicated that additional resources such as a community emergency management program and permanent communications staff with the capacity to work with First Nations residents should be put in place.

3.4.2.2.6 External Agencies

The external agencies that were interviewed during stakeholder consultation provided a wide array of services as they relate to emergency management, ranging from industry representatives and advisory councils, military and police bodies, NGOs, government funded federal agencies and departments. Overall, the agencies had a positive experience with respect to interagency response and coordination. However, their specific feedback was largely dependent on a few select factors. Organizations that had pre-existing relationships with AEMA, individuals at the POC, and with other relevant external organizations generally provided more positive feedback. Those who had not previously developed relationships, were unfamiliar with the systems and processes of the POC experienced more challenges. The organizations, however, generally provided consistent feedback with regards to the value of partnerships, and the frameworks and systems used to facilitate those partnerships.

Many of the agencies discussed the value they saw in a partnership model with the province. Both the province and the agencies recognized that each party plays an integral role in responding to large scale disasters. The scope of the flood forced all of the stakeholders to leverage each other's strengths to successfully respond. Agencies that had pre-existing plans and agreements with the province, that outlined key roles and responsibilities, spoke to how the pre work was mutually supportive during the response. Where plans and training had not occurred or had been done to a lesser extent, the stakeholders saw weakness in their ability to integrate quickly and to respond effectively, particularly in the early days following the initial onset of the flood. Additionally, stakeholders that operated under an ICS framework were able to quickly integrate within in the POC. Without prior knowledge of the ICS framework, some agencies found the operating model at the POC to be confusing, and required initial training to understand the model and how they fit in the response effort.

Most of the agencies, however, did not have a clear picture of what many of the other external agencies could provide in terms of resources and capabilities. The province did not have a clear system to coordinate between agencies or to facilitate the dissemination of information relating to available resources. Multiple agencies suggested that they would value multi-jurisdiction interagency training exercises in advance of the next major event. Furthermore, they believed that logistical coordination could be improved to help ensure that their resources are put to the most effective and efficient use.

The agencies also spoke to the physical and IT infrastructure of the POC. The building, in their view, did not support interoperability, and compounded the challenges they faced working directly with the province and with one another. Although those who had a seat at the POC found it to be highly beneficial, there was general agreement that situational awareness and a common operating picture could have been improved had the facility been better designed and had modern incident management software. Also, certain agencies felt that they should have had one of their representatives present in the POC and that the list of stakeholders that are invited should be revisited. Industry Canada, not a regular stakeholder at the POC during emergency operations, proved to be particularly helpful as they had key information relating to the IT infrastructure in the province. Their presence demonstrates the need to review the stakeholder list to ensure that the appropriate groups are seated at the table during times of emergency. Groups who had spent time in the EOC in Calgary lauded the facility and spoke to how the infrastructure and layout helped support the development of situational awareness and the maintenance of a common operating picture.

3.4.3 Public Alerting, Community Evacuation and Communications

3.4.3.1 Aim

The aim of this objective was to review the effectiveness and timeliness of public alerting and the province's support for community evacuations. It included review and analysis of the specific tools and systems in place to support this objective, namely the Alberta Emergency Alert (AEA) system, and also the broader communication infrastructure that the GoA used to disseminate alerting.

Stakeholders were requested to evaluate the roles, responsibilities, accountabilities and delegations of authority related to public alerting and whether the actual system functioned as it was intended to. A discussion of whether the data communicated was timely and accurate was also undertaken.

3.4.3.2 Observations

3.4.3.2.1 General

The stakeholders generally rated public alerting, community evacuation and communications by the province as effective. The AEA functioned as intended, and was widely adopted across affected municipalities.

3.4.3.2.2 AEMA and Flood Recovery Task Force

The AEMA officials interviewed rated the province's public alerting abilities high and were largely satisfied with its support for community evacuations. The AEA was particularly useful to communities with limited public alerting capabilities. The decentralized nature of the system is one of its greatest strengths, allowing approximately 1,000 registered users (who have received training from AEMA) to issue alerts in the event of an emergency. The system was used judiciously during the flood, with an AEA Warning and Notification Coordinator standing by in the POC to review alerts if users were unsure.

Despite the AEA's overall effectiveness, a few usability issues did arise. For instance, some users sent communications out through the AEA even though the system is meant strictly for alerts. In addition to quickly removing these broadcasts from the system, the POC also created a template to ensure the broadcasts that went out over the system were indeed alerts. The RFC also had issues using the system as the warning level and the geographical location of the rainfall changed over time. With each change, the AEA posts had to be updated. More training would help to ensure the system is used as intended.

Although the AEA can reach millions of Albertans in just 90 seconds through a variety of mediums, the system could still be improved. For instance, while the AEA can geographically target information to a street, it cannot do the same for a block or a residential area. Work is currently underway, however, to refine the system's geo-targeting. Steps have also been taken to increase the system's bandwidth and upgrade its back-up capabilities. Technological enhancements will do little, however, to improve access for those who aren't plugged into the various communication avenues used by the system (e.g. radio, TV, social media). Thought, therefore, needs to be given on how to reach these Albertans through public alerting.

3.4.3.2.3 Municipalities

Three quarters of the municipalities that responded rated the province's public alerting and support for community evacuations positively.

While the AEA system is a world-class system that was used to effectively during the flood, there is an opportunity for slight modifications. With a growing number of Albertans opting for alternative television and media delivery platforms over cable, the AEA does not reach as many people as it could. The AEA App is undoubtedly a step in the right direction, and the province needs to continue to encourage Albertans to access the service with their smartphones. The system could also be enhanced if the AEA, using existing smartphone technology, issued alerts based on geographical location. While the AEA does include Facebook and Twitter components, some argued that further work is needed to more fully realize the power of social media.

In its drive to keep pace with technological change, however, the province should not forgo more tradition mediums (e.g. radio and television) that many Albertans still rely on. Although arguably beyond the AEA's scope, thought also needs to be given on how to alert campers in the backcountry.

Some municipalities did not understand the full effect of the tool. Select municipalities indicated that they preferred to use social media accounts associated with their respective cities or towns, as they felt this would reach more local citizens. This preference was noted in spite of the fact that the AEA has active social media accounts which serve as more effective mechanisms at gaining a province-wide perspective of the impacts of an incident, and facilitate a two-way information flow with the public. Additionally, municipalities noted that since the flood, many have purchased and implemented emergency alert notification systems from third party users.

Some municipalities have installed air horns and sirens since the flood - this should be considered a positive development where these more traditional communication methods are used for rapid-onset events requiring large-scale evacuations and are complementary to the AEA's offerings.

A number of municipalities were unclear as to the roles and authorities for mandatory evacuations. One suggestion was for the province to develop a user guide, including a Frequently Asked Questions section, instructing municipalities on their role, as well as advising them on what does and does not work well during an evacuation.

3.4.3.2.4 Government of Alberta Ministries

For those in a position to comment, the province's public alerting and its support for community evacuations was assessed as effective. There were instances where more warning was not possible due to the speed of onset. For those communities downstream, however, evacuations went quite well. Where public alerting fell noticeably short, however, was in First Nation communities. Government Ministries echoed the concerns of other stakeholders about how to best reach those who have no connection to the various communication avenues used by the AEA (e.g. radio, TV, social media).

3.4.3.2.5 First Nations Communities

One impacted community indicated that they were not notified of the imminent emergency by the province. This community used information gleaned from the media about other municipalities to declare the emergency in the community. Had the GoA provided sufficient warning, the community administration may have had better and more diverse ways of notifying its members. Instead, the community administration had to travel door-to-door to warn members. The community noted that many of its members chose not to heed the media reports of impending danger as no official warning had been given from the province.

In addition to the lack of advanced warning from the provincial government, the First Nations communities affected by the flooding indicated that the process for using the AEA system is unclear, and in the case of First Nations communities, often ineffective due to the landscape on-reserve. It was noted that an additional alerting system or process could be beneficial. The communities indicated that they would like to be involved in the development of any new systems or processes because of the unique cultural and technological landscape on reserves.

The RFC undertook an after action report recognizing this disconnection, a key objective for future improvement was to "address cross-jurisdictional policy issues and government responsibilities [with First Nations communities] to ensure seamless transmission of crucial information during an event." The study identified the need to provide First Nations communities with access to flood hazard maps, address and to work with First Nations communities to improve communication, develop protocols and build an understanding of what the RFC does and the services they provide.

3.4.4 Evacuee Support and Interim Accommodation

3.4.4.1 Aim

The aim of this specific objective was to review the province's emergency accommodation response including its coordination with communities and social service organizations. This includes whether an agency has been identified to lead this process, and whether there was a clear mandate for this agency, as well as defined responsibilities, authority and accountabilities.

3.4.4.2 Observations

3.4.4.2.1 General

The general impression from the interviewed stakeholders with regards to evacuee support and interim accommodation was generally consistent across the stakeholder groups. The average rating the province received in this category was effective. Larger municipalities that were interviewed, however, were more reluctant to provide a rating as they provided interim accommodation and evacuee support on their own, and were supported by the province as required.

3.4.4.2.2 AEMA and Flood Recovery Task Force

Given the unprecedented number of Albertans affected by the flood, the province's emergency accommodation response was largely successful. AEMA officials did, however, identify areas where improvements could be realized, including providing more realistic updates to Albertans (e.g. one Minister promised that evacuees could be moved into mobile homes within a week, a commitment that simply was not feasible given the circumstances of the event).

NGOs made a critical contribution to the response and recovery effort, but there was also a few command and control issues. To lessen the number of problems, the government leveraged the NGO Council, run by two full-time employees, to coordinate the efforts of the NGOs. An ESS framework could have added some much-needed rigor to the process. An approved framework that aligns with the formalized relationship with the NGO Council would also be helpful in future events, particularly if multiple disasters occur at the same time requiring assistance from NGOs.

One of the takeaways from the 2011 Slave Lake fires was that a reception centre alone will not suffice; there needs to be additional focus on where evacuees are going to live in the interim period. As soon as the magnitude of the flood became apparent, a recovery-planning unit was formed and tasked with finding accommodations for those affected.

A challenge encountered was communicating with the evacuees once they had been temporarily relocated. Officials tried various avenues of communication, including newspapers, radio, TV, social media, and even word of mouth. Despite this comprehensive approach, they were unable to get messages through to everyone they needed to contact. A better system for registering and tracking evacuees, therefore, should be developed for use during future emergencies. NGOs such as the Red Cross has such systems in place which have been successfully used to record evacuee information, status and assist with family reunification during previous disasters in all parts of the world. The province should consider implementing a similar system to what is already in use by these NGOs, and has been proven effective.

3.4.4.2.3 Municipalities

The majority of the municipalities interviewed did not assign a specific rating to the province's emergency accommodation response, opting instead to detail particular strengths and areas for improvement.

Volunteer management was a challenge encountered by many municipalities. Moved by the plight of their fellow Albertans, men and women from across the province flowed into affected communities to provide assistance. Unfortunately, there was not an adequate structure in place to maximize the effectiveness of these volunteers' efforts and provide for their safety. According to some officials interviewed, the province should take a leadership role in this area, developing guidelines and standards that municipalities can follow.

While the province generally did a good job of deploying ESS resources, a series of logistical issues did arise. Many municipalities felt that there was a need for more trained personnel to call upon, including public information officers and social support workers. Indeed, some argued their reception centres suffered because they did not have adequate social support workers.

3.4.4.2.4 Government of Alberta Ministries

The majority of those interviewed rated the province's emergency accommodation response, including its coordination with communities and social service organizations, effective. Liaison officers played a key role in coordinating and directing people in affected communities, with call centres also playing an important role. At first, the province had difficulty determining how many people were going to require interim accommodation. More spaces were prepared than were ultimately necessary because so many evacuees made alternate arrangements. However, many of those who did use the shelters required long-term shelter that these facilities were not equipped to provide. This has occurred in previous large-scale events. During Hurricane Sandy, New York City officials opened shelters to accommodate up to 71,000 evacuees, but ended up housing only 6,800[63] residents, all of whom required housing for longer than three days.

The province needs a centralized database that can better document and tracks evacuees, including their cellphone numbers and emails so they can be contacted with further information. It would also help if the province had a program to teach communities how to establish evacuation centres, and there is an opportunity to recruit NGOs to assist with this training.

3.4.4.2.5 First Nations Communities

Interim accommodation was an area where the impacted Aboriginal communities had differing experiences. Emergency interim accommodation was set up primarily by the communities with the province providing support and overseeing its operations. While some community members chose to set up their own accommodations (such as tents or staying with relatives) and decided not to rely on the province to provide shelter, the interim accommodation provided was considered extremely important to the overall response and was widely used. With many citizens setting up their own accommodation, there was also a concern regarding the health and safety of those shelters as there was no way to monitor this. One community felt that the initial emergency interim accommodation was quickly addressed by the province and was an overall success. The POC coordinated and fulfilled requests for supplies and support rapidly; however, the same community indicated that the initial emergency shelters were taken away too quickly without an alternative means of accommodation for community members, and that subsequent interim accommodation was not provided quickly enough to satisfy the needs of the community.

The impacted Aboriginal communities indicated that they didn't witness enough pre-planning and management over the allocation of funds for interim accommodation and housing rebuild, which led to a loss of control over the budget and no accountability over funding dollars that were spent. As of June, 2014, many community members remained displaced. Over 335 Siksika Nation residents were still living in relief shelters, and 357 Stoney Nation residents remained in interim housing.

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[63] NYC Hurricane Sandy After Action Report (2013).

3.4.4.2.6 External Agencies

There were a limited number of external agencies that were interviewed that discussed evacuee support and interim accommodation. The agencies that did discuss this theme did not provide an overall rating, however, the feedback was generally positive. Most of the feedback was received from NGOs that helped coordinate support evacuees the flood.

An issue that many of the organizations spoke to was that the registration forms for evacuees used by each agency were inconsistent. The province did not have a standardized form or template to collect information in a consistent manner. The evacuee information was not effectively shared across organization and individuals who needed to provide information to multiple agencies were required to fill out duplicate forms often with the same sets of information. In certain circumstances, individuals were double counted, having impacts in other related areas of recovery.

3.4.5 Transition from Response to Recovery

3.4.5.1 Aim

The aim of this specific objective was to review the procedures for, and effectiveness of, the province's shift from response operations to the initiation and mobilization of its recovery operations.

3.4.5.2 Observations

3.4.5.2.1 General

The experience that affected communities and municipalities had from the transition from response to recovery varied. Generally, the province received a rating of effective with regards to this objective. Initially, municipalities were uncertain as to the process for recovery, but as the framework was developed and the FRTF's mandate and responsibilities were solidified, the outcomes improved.

3.4.5.2.2 AEMA and Flood Recovery Task Force

By and large, the province's shift from response to recovery operations was handled well. Each municipality was handled individually to ensure its specific concerns were addressed.

At times, the roles and responsibilities associated with the transition process were unclear. There was a great deal of ambiguity, for instance, concerning the roles of the AEMA field officers and the FRTF Recovery Coordinators. Although the latter were tasked with leading the recovery, the Field Officers still had an important role to play. Thinking that Recovery Coordinators were taking over, a number of field officers stopped communicating with municipalities. In other cases, Recovery Coordinators duplicated the work already done by Field Officers.

3.4.5.2.3 Municipalities

The municipalities were largely satisfied with the province's shift from response to recovery operations. Some municipalities said they were unclear on which ministry was the lead during the transition. This confusion, however, did dissipate with time. At times, the role and responsibilities of the Flood Recovery Task Force were also difficult to discern. Although initially problematic, with instances of provincial representatives failing to share information and points of contact changing, communication did improve over the course of the transition.

3.4.5.2.4 Government of Alberta Ministries

Those interviewed were mixed when asked to rate the province's shift from response to recovery. In was unclear to many when the transition process took place. Despite its clear contribution to the overall effort, the FRTF did cause some problems as its role and mandate weren't as clearly defined as they could have been. The task force also should have included a communications component from the beginning (this portion of the team was created in late August/early September at which point the recovery was well underway).

3.4.5.2.5 First Nation's Communities

When changes were made by the province to the points of contact in the communities during the transition from response to recovery, communication often became difficult, as information needed to be repeatedly relayed to new provincial government contacts. Changes to points of contact from contractors and other external agencies further confused the situation and stifled communication.

The amount of communication from the provincial government and other agencies to impacted Aboriginal communities was viewed as not sufficient and at times left the community administration without the necessary information to be effective in their roles. During the transition from response to recovery, the province worked with external agencies to coordinate on-reserve assistance; however, there was a lack of communication and information passage to the communities about this assistance. This resulted in the communities being unaware of what was available to them, in addition to confusion regarding who was authorising the external agencies to act on-reserve.

Two examples help illustrate this issue. In one community there was initial discussion between the community administration and the provincial government regarding creating a system for community participation in recovery and housing rebuild efforts; however, external contractors were authorised to begin recovery work on-reserve without any communication to the community. In another community, a boil water advisory was enacted and lasted longer than was necessary as there had been no further communication to the community to inform them that it had been ended.

3.4.5.2.6 External Agencies

Very little feedback was provided with regards to the transition from response to recovery by the external agencies that were interviewed.

External agencies that were involved on in the recovery effort, for example the NGOs, witnessed some of the symptoms of a lack of framework and transition plan from response to recovery. The roles and responsibilities of the FRTF were not initially understood, and lines of communications were not as clear during the transition period as they became once the recovery framework had been clarified.

3.4.6 Health and Safety

3.4.6.1 Aim

The aim of this specific objective was to review the province's provision of emergency medical and social supports to impacted communities. It included review and analysis of policy and governance structures in place to guide medical and social supports to communities impacted by the 2013 flood.

3.4.6.2 Observations

3.4.6.2.1 General

Many of the stakeholders that were interviewed did not provide a rating for this response objective. The province received praise with respect to emergency health services, however, the feedback that was provided regarding emergency social services was mixed. There was evidence that the lack of a predetermined emergency social services framework resulted in suboptimal outcomes in certain communities. Larger municipalities were able to provide the requisite emergency social services for impacted residents, but smaller municipalities often lacked the capacity and relied more heavily on the province. Multiple stakeholder groups suggested that a dedicated emergency social services task force would help improve communications and logistical supports, resulting in improved outcomes for impacted individuals.

3.4.6.2.2 AEMA and Flood Recovery Task Force

AEMA officials gave the province a strong grade for its provision of emergency medical and social supports to impacted communities. Through its representatives in the POC, Alberta Health provided regular briefings, including status updates on hospital evacuations (all of which went well). On the ground, officials went door-to-door in affected communities to ensure residents were aware of various programs and supports. Although there were fewer uptakes than desired in certain cases (e.g. psychosocial supports), this certainly wasn't from a lack of effort on the part of officials.

3.4.6.2.3 Municipalities

The majority of the municipalities interviewed felt that the province did an effective job of providing emergency medical and social supports to the communities affected by the flood. Some municipalities felt that more social support workers were needed. Others felt the province should have been more proactive in informing communities about the resources and services available from AHS and various non-governmental organizations. It was also suggested that AHS should be required to have a presence in all EOCs to cut down on miscommunication.

3.4.6.2.4 Government of Alberta Ministries

Psychological and social services weren't effectively integrated into the overall response and recovery framework. Responsibility for these supports was assigned after the floods, resulting in a reactive rather than a proactive response. The resources that were available, unfortunately, weren't efficiently used. Psychological and mental health support resources often weren't given sufficient notice of upcoming public forums or meetings. This, obviously, is unfortunate as their presence would have been a great comfort and help to those who needed it. There was also insufficient mental health support resources for those government employees working on the ground in flood-affect communities.

3.4.6.2.5 First Nations Communities

The impacted Aboriginal communities indicated that they perceived there to be a lack of provincial resources to assist with health and safety on-reserve during the response and recovery. These concerns fall into two categories: emergency medical response resources and emergency social services.

The impacted Aboriginal communities did not experience any specific emergency medical concerns; however, the communities felt that if there had been significant emergency medical concerns or additional safety concerns then the province did not have sufficient resources to assist the communities.

Emergency social services is an area that was noted to be lacking on-reserve. One community noted that it requested various emergency social support personnel on-reserve, specifically social workers. The community noted that it appreciated that the provincial government was willing to provide funding to assist in hiring the appropriate personnel; however, the community did not have the capacity to attend to the issue, and in this case it required staff as opposed to funding.

3.4.6.2.6 External Agencies

Many of those interviewed did not have any feedback to provide relating to this objective. The NGOs, however, were deeply involved in the provision of emergency social services and had substantial feedback for the province.

Recognizing the efforts of the individuals involved in the provision of emergency social services, the agencies voiced that this is a clear and definite area for improvement. The province lacked a predefined framework to provide emergency social services, and as a result, the ability of those charged with responding, in coordination with the external agencies supporting the effort, was impacted. Additionally, the agencies raised concerns relating to the health and safety, specifically with regards to volunteer management and home re-entry.

The province's emergency social services roles and responsibilities were not always clear and transparent to the external agencies supporting the effort. Communication was at times adversely impacted because of this lack of clarity. Agencies were unaware of who was the most appropriate individual to contact with respect to specific issues. This issue was compounded in First Nation communities where the existing cultural environment, extent of the impact, and unclear jurisdictional authority resulting in unclear leadership and communication challenges. The agencies felt that their resources and expertise, specifically with regards to the provision of emergency social services, would be better coordinated through the province. With an effective framework with predefined roles and responsibilities, the province would be able to provide interagency coordination and assign resources to high priority areas.

The province did not have a good system for tracking and coordinating the distribution of available ESS resources. The requests from impacted municipalities did not always get through to the appropriate agency. They recommended a separate ESS taskforce be created to help support the logistical effort in providing smaller items that are of critical importance to the provision of emergency social services that may be overlooked in the broader context.

Volunteer management was an emergent issue relating to this objective. The agencies noted that although volunteer spirit and effort was extremely helpful during the recovery phase, volunteers were at times put at risk due to lack of proper training and proper personal protective equipment. The flood impacted homes and resulting waste represented a health concern, and volunteers were at times unaware of the risks that the material presented and engaged in relatively risky behaviour.

The NGO's also voiced concern over the speed of re-entry, specifically in High River. They believed that the health risk of sending flood impacted people back to their homes prior to the completion of the hazard identification, clean up, and proper planning far outweighed the benefits of sending people home.

3.4.7 Provincial State of Emergency

3.4.7.1 Aim

The aim of this specific objective was to review the processes, procedures and implementation of the Provincial State of Emergency in High River. It included review and analysis of whether a clear mandate and decision making process was in place to guide the declaration of a Provincial State of Emergency.

3.4.7.2 Observations

3.4.7.2.1 General

The declaration of a Provincial State of Emergency (PSOE) requires extreme circumstances. The scope of the disaster must outstrip the municipalities' capability to respond to justify the enactment. Most municipalities believed that an enactment of a PSOE was not needed in their recovery and response efforts as they had sufficient planning and resources to effectively respond. However, communities on the eastern slopes that were impacted early on in the disaster may have benefited from additional Provincial intervention, particularly in cases where the municipalities'/communities' resources were stretched thin in the early days of the event.

3.4.7.2.2 AEMA and Flood Recovery Task Force

Overall, the Provincial State of Emergency (PSOE) – the first ever in Alberta's history – was a success. Provincial officials worked with local officials to ensure the province and High River aligned, members of the media were effectively briefed, and the emergency management directors on the ground did an exemplary job of establishing an Emergency Operations Centre.

What concerned AEMA officials was the process behind the declaration and implementation of the PSOE, or more specifically, the fact that there was no formal process. The actual statement of declaration didn't have a date and time stamp, so officials had to solicit legal opinions to determine when the PSOE was over. A standard operating procedure, therefore, needs to be developed for future PSOEs. Given the fluidity inherent in disasters, the process should allow for some flexibility.

3.4.7.2.3 Municipalities

The municipalities appreciate the power the current system places in their hands. In terms of the larger process, most of those interviewed said the provincial State of Emergency (SOE) works well. However, there is a lack of clarity as to what an SOE actually entails. Even though the legislation is clear on this point, there is a misconception among some municipal staff who believe their responsibilities cease once a provincial declaration is made. In terms of the province's decision to confine the SOE to High River, some officials suggested that had the government expanded it to include the entire affected zone, greater resources and federal assistance may have followed.

3.4.7.2.4 Government of Alberta Ministries

The declaration of a provincial state of emergency in High River enabled the province to provide additional support to the community as flooding overwhelmed its capabilities. Despite its ultimate success, some concerns were raised, including the fact there isn't a set of criteria to determine when the province should declare a state of emergency (there was also some confusion as to the difference between a provincial state of emergency and a state of local emergency). Some of those interviewed also contended that the province should have declared the state of emergency earlier.

3.4.8 Recovery Activities

3.4.8.1 Aim

The aim of this specific objective was to review the effectiveness and efficiency of the province in addressing the immediate and long-term, recovery needs of the people and communities impacted. It included review and analysis of the effectiveness of the Flood Recovery Task Force. This objective also focused on a major component of the provincial efforts, the DRP. All stakeholders were asked to provide input surrounding the effectiveness of the DRP, and the key issues and challenges resulting from this program.

3.4.8.2 Observations

3.4.8.2.1 General

The province received an overall rating of effective with respect to this objective. The FRTF was viewed as instrumental in facilitating the recovery efforts. The resources, expertise, and capacity the province provided were instrumental in the recovery efforts. There was, however, substantial feedback provided with regards to the funding and regulatory processes. Impacted stakeholders often commented on difficulties they had navigating the funding process; municipalities that were unfamiliar with the DRP requirements found the process particularly challenging. Furthermore, municipalities were often unclear in the changing regulatory requirements as the province transitioned from addressing immediate response requirements to long term recovery initiatives.

3.4.8.2.2 AEMA and Flood Recovery Task Force

According to the AEMA officials interviewed, the province has done an effective job addressing the immediate and long-term recovery needs of the communities and individuals affected by the flood.

One of the greatest challenges officials faced was managing the expectations around the DRP. As one interviewee noted, "In essence, problems around the DRP were related to managing expectations, and a government that didn't realize what their own policy was, and in the end didn't like their own policy. They found it was too restrictive and wanted to do more. The Treasury allowed them to do more."

Recovery Coordinators who had not been sufficiently trained on the program caused some issues. Another key issue was whether the DRP should have been assumed by the FRTF. Although the program was left with AEMA because of its technical expertise to run the program, many officials felt it should have been assigned to the FRTF.

3.4.8.2.3 Municipalities

Two thirds of the municipalities interviewed said the province did an effective job of addressing the immediate and long-term recovery needs. Areas where the municipalities reported the province's efforts fell short included: inadequately trained staff in junior positions who lacked decision-making authority, the dissemination of incorrect information, instances of miscommunication or no communication at all, which resulted in wasted time and resources.

"The task force," in the words of one municipal official, "was an absolute gem," which played a crucial role in the recovery effort. However, while the governance structure of the FRTF was largely effective, its role, responsibilities, and accountability were at times unclear.

Although the DRP was generally felt to be effective, a number of those interviewed commented that the procedure for submissions could be improved (e.g. allowing electronic submissions), that claims could be processed in a timelier manner, and that the process in general could be streamlined.

Since the 2013 floods, the province has committed a significant amount of time and resources to rectifying these issues. The province has developed materials outlining what the DRP offers for each eligible party, including individuals, small businesses, agricultural producers and municipalities. Included in all materials is an explanation of how the DRP differs from insurance coverage. As the recovery period has progressed, the province has been incorporating feedback in current operations even as they undertake a comprehensive review of the program. Moving slowly towards a case management model, the province has also opened DRP offices in High River and Calgary to provide in-person service for affected individuals. While the efforts by the province to remedy this situation is commendable, some stakeholders stated they fail to understand the logic behind the GoA's approach. As noted, the province received over 10,594 submissions under the 2013 flood DRP and has closed over 8,000 files as of December 2014. Some stakeholders contend that these files remain in a state of flux because the government's risk aversion to overspending on DRP payments. They argue that this concern is outweighed by the commitment made during the initial response.

While the payment cards were a good idea that provided a much-needed helping hand to many affected Albertans, the execution was poorly communicated and executed. Not only was the distribution process inadequately staffed, the eligibility criteria were often unclear. An improved process for the issue of payments to individuals for future events should be developed.

3.4.8.2.4 Government of Alberta Ministries

Most of those interviewed felt that the province's recovery efforts were effective. There was a clear and early commitment from the province to do what it could to support recovery. Governance was set up to identify priorities and a streamlined approach to meeting government accountabilities was adopted. Both of these moves helped to expedite matters. Despite the confusion concerning its role and responsibilities and some duplication of efforts, the FRTF made a critical contribution. The task force, however, should have had communications component from the onset. The MTF played a crucial role by accelerating decision making and funding.

Reaction among those interviewed concerning the payment cards was mixed. Many felt that the program could have been coordinated better. Similar payments were made for the Slave Lake Fire and prior emergencies. Following Slave Lake, recommendations were made to improve the payment card process but were not fully implemented. During the 2013 floods, there were difficulties finding the staff necessary to administer the program (about 1,000 were required), these employees were secured at the expense of other aspects of the flood response. Other problems with the payment cards identified by the interviewees included logistical challenges for securely transporting and storing the cards (including security challenges), determining who was eligible for the cards, various technological issues, including the fact that Super Net, which was required for the payment card program, was not available in all communities.

3.4.8.2.5 First Nations Communities

There were a number of financial support programs available for evacuees and impacted communities, including payment cards for evacuees, the DRP, and additional programs created on an ad-hoc basis to assist during the recovery. All impacted Aboriginal communities expressed appreciation for the creation of these programs and for the provincial government's financial assistance; however, challenges were experienced by the impacted communities in accessing these programs due to difficulties in navigating the processes designed to execute them.

The impacted communities generally felt ill-informed regarding decision and approval processes throughout the recovery period. In some cases, decisions that had been previously reached would either be retracted or not followed through. This primarily resulted from decisions and approvals being made without the appropriate written documentation in place and in some cases by individuals making decisions without proper authorities to do so.

Additionally, it was noted by the Aboriginal communities that the process for communicating eligibility for the DRP and other recovery programs was not well defined. Provincial government staff and representatives communicated information on the programs to the communities in a variety of different ways using a variety of different sets of information. This led to confusion regarding what recovery activities would be funded in the communities and as a result, in some cases, more money was spent than was reimbursed.

One community noted that they had qualified and available members that were willing to assist the province with a variety of administrative and functional tasks. The community administration set up a steering committee to assist in the project management of their housing rebuild, which has helped improve community engagement and provided stakeholders a meaningful way to participate in the decision making process while also providing the province with project management assistance for the rebuild effort.

The payment cards provided to evacuees by the province were greatly appreciated; however, it is thought that the lack of a pre-determined process for determining eligibility and for documenting and disseminating payment cards created confusion and may have led to abuse of the system.

While the Field Officers involved in the response were well trained and effective, the communities indicated that in a number of cases during the recovery the provincial staff on the ground in the communities lacked the appropriate training to be effective prior to being sent into the field. In some cases this led to inaccurate information being provided to the communities. The DRP was a specific area where, at times, the individuals on the ground lacked the knowledge to assist the community; however, it was noted by one community that the provincial government recognised this issue, and sent a mobile DRP unit into the community, which was very effective.

Information was often requested by the Provincial government from the Aboriginal communities multiple times by different GoA staff members. This duplication of effort was seen by the communities as being the result of staff turnover and insufficient internal provincial communication and information sharing.

Recent disasters in other Canadian provinces have resulted in similar observations. Namely, that response is managed efficiently but recovery is often fragmented and has long-lasting impacts. In 2011, widespread flooding in Manitoba impacted more than 4,000 citizens living in 14 First Nations communities. An after-action report commissioned by Aboriginal Affairs and Northern Development Canada in 2013 reported that almost 2,000 of these citizens from 6 communities were still impacted.

3.4.8.2.6 External Agencies

There was insufficient input from the external agencies to provide an overall rating for the province with respect to the recovery effort.

One external agency that was interviewed was heavily involved in the recovery effort relating to insurance and DRP. The Insurance Advisory Council was assembled to review and provide and advise relating to issues with insurance and DRP processes and claims. As the recovery efforts unfolded, their mandate continued to expand and had significant exposure to the challenges faced by the DRP program. In their interview, they discussed many recommendations on how to improve the process and to simplify the DRP for citizens. They focused on providing clear, transparent payment programs for claimants and improving communications and information accessibility of the DRP.

Furthermore, they also discussed the importance of having individuals that are well trained in both process of claim management and also with dealing with individuals who have been impacted by a disaster. There is an emergency social services component to effectively processing a claim that they believe should be addressed.

4 Recommendations

Key recommendations under each theme are intended to provide guidance and assist the province in sustaining the success achieved and implementing the improvements. These recommendations include and incorporate the individual recommendations noted in Section 3 and are designed to provide clear actions that the Government of Alberta can use going forward.

Recommendations by Theme	
Theme: People, Attitude and Approach	
Theme Recommendation	The demonstrated "can do" attitude, acknowledgement that a disaster is not business as usual and all-inclusive approach to assisting those affected should remain the province's foundational approach for future response and recovery efforts. The "can do" attitude and approach should be guided and channeled by established and practiced emergency management frameworks, structures and plans.
1	**Develop an Emergency Management Staff Wellness Program.** While the overall attitude and approach taken, and the exceptional work of individuals was a differentiator for the province, the volume of work, pace and demands had an impact on people. Consideration should be given to the development of a program and basic procedures to assist in caring for GoA staff physical and mental health, both during and after the disaster. The program should leverage existing GoA health and wellness programs and include: • Stress management and counselling • Reward/recognition program for those involved in response and recovery to include notes to career personnel files and mention of emergency management roles and accomplishments in annual performance reviews • Rest and recuperation space/rooms in the new POC
Theme: Provincial Framework, Structure and Plans	
Theme Recommendation	In order to effectively harness and coordinate the emergency management capacity and capabilities of Ministries, municipalities and other stakeholders the province should ensure that appropriate provincial-level frameworks, structures and plans are in place for all aspects of emergency management.

Recommendations by Theme	
2	**Complete the update to the Alberta Emergency Plan.** The Alberta Emergency Plan should be considered as the key document for ensuring a unified and coordinated approach to emergency management throughout the province. The document should clearly articulate the requirements outlined in the Government Emergency Management Regulation, details from Public Safety Governance and specifics such as direction to municipalities that include: • Direction for the implementation and use of ICS • Plan structure and direction on what should be included in an emergency plan • Requirements for hazard, risk and vulnerability assessments (HRVAs) • Roles and responsibilities of AEMA Field Officers • Guidance for the regionalization of emergency management programs, including Memorandums of Understanding (MOUs) and resource sharing where applicable • Guidance for development and deployment of Incident Management Teams • Basic roles for elected officials • Requirements for municipal plan testing and exercises • Requirements for exercises and training • Requirements for regular plan maintenance
3	**Maintain existing frameworks, structures and plans and implement identified improvements.** The key frameworks, structures and plans that were in place prior to the 2013 floods, or developed during recovery, proved to be effective and should be adjusted as required and fully imbedded into the emergency management system. In particular: • Continue to follow and refine the Public Safety Governance framework and make adjustments if required based on lessons learned from the 2013 floods. • Formalize the Ministerial Task Force and Task Force structures and embed them into Alberta's emergency management system with documentation, pre-selection and training of Ministers and Chief ADMs • Implement and operationalize the Recovery Operations Manual and recovery procedures to include: o Identifying and training staff for each position o Ensuring an appropriate emergency operations facility/workspace o Conducting recovery-focused exercises to test and practice processes o Updating and refining the manual

Recommendations by Theme

4

Develop and implement a provincial Emergency Social Services framework.

This framework should be completed as a priority. Aligning with industry leading practices, and considering where social services expertise is within the GoA, Human Services is best positioned to lead the Emergency Social Services (ESS) Framework development and the ESS program. The process used to develop the Public Safety Governance framework is a sound model to follow. Working with municipalities, NGOs and applicable Government of Alberta Ministries, the ESS Framework should include but not be limited to:

- Emergency social services guiding principles and overall provincial structure
- Delineation of roles and responsibilities for all stakeholders
- Communication and coordination processes between all ESS stakeholders
- Concept and process for emergency interim accommodation
- Resource sharing framework
- Volunteer management
- Donations management
- Assistance and information teams to support displaced residents
- Psychological and social support
- Common forms and procedures
- ESS support for re-entry planning
- Guidelines for donations management
- Database system for tracking evacuees

In addition, the province should:

- Develop the criteria and detailed process and procedures, to include roles and responsibilities, for distribution and management of emergency payments (payment card) to displaced residents
- Develop guidelines to assist municipalities with volunteer management. Consider leveraging the Public Safety Lifeline Volunteers program used in British Columbia

	Recommendations by Theme
5	**Complete the redesign and implement changes to the Disaster Recovery Program.** Considerable effort and focus has gone into managing and improving the DRP and progress has been made. The Government of Alberta must consolidate and simplify the application and tracking process for all types of funding provided and leverage the lessons learned from the 2013 floods. Specific attention should be paid to streamlining the overall process, continuing the awareness campaign and improvements to the processing of individual claimant files. It is recommended that changes include: • Move to a case worker model and ensure case workers have advanced training related to the DRP, and experience providing social services if possible • Implement an electronic file management system • Improve communication and messaging • Developing capacity and capability to open and operate Disaster Recovery Offices in selected communities as required • Identification of, and partnerships with, selected industries and specialists, who can assist with DRP delivery during large-scale disasters
6	**Develop a new, state of the art Provincial Operations Centre (POC) facility.** Effective communication, coordination and synchronisation is heavily dependent on the physical size and layout of the POC, and supporting incident management software. In addition, the facility itself must be resilient as the loss of this facility would have an extreme impact on the province's ability to fulfil its role in an emergency. The new POC facility could either be a purpose-built facility or constructed in an existing GoA building. Characteristics of the new facility should include: • The required physical and IT infrastructure and resilience • Adequate size and layout to properly house all emergency management partners • Incident management software to enable more effective situational awareness, information management, coordinating and tracking of activities and resources and reporting
7	**Continue to refine and improve Government of Alberta Business Continuity Program.** The 2013 floods constituted a business continuity event for the GoA and the existing plans and program were effective. Ongoing effort should focus on: • Plan and program assessment and refinement • Enhancing business continuity plans at the department and agency level • Business continuity training and exercises

Recommendations by Theme	
Theme: Emergency Management Capacity	
Theme Recommendation	The province must continue to focus on programs and activities that build emergency management capacity within the Government of Alberta, as well as those which facilitate, assist and set the conditions for capacity building in municipalities and First Nations.
8	**Ensure training, awareness and exercises are a top priority and continue to develop, enhance and fund these activities.** Training, awareness and exercises, both internal to the GoA and within municipalities, are critical components of building emergency management capacity. It is through continuous training and practice on specific procedures, increasing overall awareness, and holding activities to collaborate with partners, and build relationships that emergency management capacity is increased. A comprehensive and focused training, awareness and exercise program is critical and the program should include different delivery methods and continue to evolve to meet the needs of the different audiences. The program should include, but is not limited to: • ICS training • POC Augmentation and POC operations training • IMT training • Recovery and DRP training • Emergency Social Services training • Annual or bi-annual provincial multi-jurisdictional exercises • Annual or bi-annual municipal / First Nations exercises • Summits and workshops • Development of an emergency management guide and specific training and awareness for elected officials and Deputy Ministers • General awareness sessions on the emergency management system for all GoA staff • Training needs assessment in all municipalities and First Nations
9	**Continue to enhance and develop the Field Officer Program.** Field Officers are a key component of the emergency management system. Their value and contribution to capacity building is through planning, training, ongoing advice, and general assistance prior to an emergency, and obtaining resources and facilitating communications during response. It is recommended that the Field Officer program remain a priority and include: • Funding to ensure all positions are full time • Ensuring that individuals selected to be Field Officers receive the requisite training • Minimizing turnover as much as possible and allow Field Officers to build relationships with their communities

Recommendations by Theme	
10	**Support and facilitate regionalization of emergency management in Alberta.** The concept of regionalisation for emergency management has proven to be highly effective and increases capacity at the municipal level. The GoA should continue to support and facilitate the regionalisation of emergency management through: • Offering grant programs, funding and other assistance that encourages the regionalization of emergency management • Providing direction regarding IMT structures, details and clarity surrounding general terms of reference, command and control relationships and deployment
11	**Support and focus emergency management capacity building in First Nations.** Facilitating capacity building in First Nations is not substantially different than what is required in all municipalities. It is underpinned by Field Office participation, assistance with plan development training, access to funding and general advice and guidance. It is recommended that the First Nations Field Officer program, and building emergency management capacity in First Nations, remain a priority. In particular it is recommended that: • Individuals selected to be Field Officers receive the requisite cultural training and build relationships with the communities • Field Officers are fully aware of the different provincial and federal funding sources available to First Nations for emergency management • First Nations Field Officers also act as Recovery Coordinators for the recovery phase • First Nation Field Officers complete emergency management program development and training needs assessments with their respective First Nations communities and help each community build a roadmap to drive capacity building and continuous improvement
12	**Address staffing and staff capacity challenges through training and select hiring for key positions.** Staffing levels and capacity will always be an issue during any large scale emergencies. The challenge is best addressed through targeted pre-disaster hiring in key areas, and by building emergency management capacity and skills through the training of existing staff. It is recommended that: • The GoA focus on emergency management training to increase capacity that can be called upon during an emergency. This includes but is not limited to training additional COMs within each ministry with the goal being to have four (4) ready at any time to support the POC, emergency management operations, and/or business continuity. • The hiring of additional staff should be targeted and focused on high-priority capacity building positions such as AEMA Field Officers, AEMA personnel to plan and implement training and staff for key DRP management and recovery positions.

Recommendations by Theme	
13	**Pre-qualify vendors and create a standing offer/vendor of record list for contracted emergency management response and recovery services.** To expedite the contracting process, assist with contract management and ensure an open and fair contracting process the GoA should use existing procurement processes to pre-qualify vendors and create a standing offer/vendor of record list for emergency management response and recovery services to include, but not limited to: • Temporary accommodation • Construction services • Building damage assessment • Food services • Transportation (vehicle rental, bus service etc.)
Theme: Communications	
Theme Recommendation	To improve communications it is recommended that focus be placed on items in the other themes: development of the appropriate frameworks, plans and procedures, and ensuring all involved are trained and aware of the procedures.
14	**Improve communications and information passage within the GoA, to municipalities, and to the public.** Gaps in communications and information sharing was an issue raised by many stakeholders. Although it was understandable given the circumstances, it was a noted area for improvement. In addition to the overarching theme recommendation above the following is recommended: • Implement an effective emergency management software system and supporting processes in the POC • Provide crisis communications training to PAB staff who work in the POC • Consider designating a single point of contact or liaison to field questions from MLAs and provide up to date and relevant information when requested
Theme: Continuous Improvement	
Theme Recommendation	The province should sustain the current improvement momentum and focus on gaps that were known to exist prior to the 2013 flood and had not been addressed, and ensuring follow through on improvement initiatives currently underway.

Recommendations by Theme	
15	**Complete work on previously identified areas for improvement.** Significant emergency management improvement was made between the 2011 Slave Lake fires and the 2013 floods. However, some opportunities for improvement had not been completed and these should be a priority. Focus for improvement should be on the following: • Redesign of the DRP • Completion and roll out of the updated Alberta Emergency Plan • Development and implementation of the ESS framework
16	**Document procedures that were developed and effectively used during the 2013 floods and action items identified in the numerous after action reviews completed to date.** A number of effective procedures were developed during response and recovery and it is essential that these be fully documented and imbedded in the emergency management system. In addition, a large number of after action reviews were completed by the various ministries and the FRTF and good recommendations were made. It is recommended that the GoA: • Document and formalise procedures and processes that were developed at time of disaster • Ensure that recommendations from after action reviews completed by ministries and other groups within the GoA continue to tracked and followed through to completion

Appendix A – Participants in Stakeholder Consultation

Stakeholder Organization	Stakeholder Information
Government of Alberta	Alberta Aboriginal Affairs, Minister
Government of Alberta	Alberta Education, Alternate Consequence Management Officer
Government of Alberta	Alberta Emergency Alert (AEMA), AEA/GIS Coordinator
Government of Alberta	Alberta Emergency Alert (AEMA), GIS Coordinator
Government of Alberta	Alberta Emergency Management Agency, Acting Managing Director
Government of Alberta	Alberta Emergency Management Agency, Director of Provincial Operations and POC Director
Government of Alberta	Alberta Emergency Management Agency, Director of Public Safety Initiatives and POC Director
Government of Alberta	Alberta Emergency Management Agency, Executive Director, Disaster Recovery
Government of Alberta	Alberta Emergency Management Agency, Executive Director, Provincial Operations
Government of Alberta	Alberta Emergency Management Agency, Executive Director, Public Safety Initiatives
Government of Alberta	Alberta Emergency Management Agency, Executive Director, Recovery
Government of Alberta	Alberta Emergency Management Agency, Managing Director

Stakeholder Organization	Stakeholder Information
Government of Alberta	Alberta Enterprise and Advanced Education, Manager, Emergency Management and Administrative Services
Government of Alberta	Alberta Environment and Sustainable Resource Development, Consequence Management Officer
Government of Alberta	Alberta Environment and Sustainable Resource Development, Emergency Response Unit Manager for ASERT
Government of Alberta	Alberta Environment and Sustainable Resource Development, Lead Consequence Management Officer
Government of Alberta	Alberta Environment and Sustainable Resource Development, Minister
Government of Alberta	Alberta Health, Chief Addiction and Mental Health Officer
Government of Alberta	Alberta Health, Consequence Management Officer
Government of Alberta	Alberta Health, Executive Director, Health Analytics
Government of Alberta	Alberta Health, Primary Consequence Management Officer
Government of Alberta	Alberta Health Services, Executive Director of Emergency and Disaster Management
Government of Alberta	Alberta Health Services, Vice-President Province Wide Clinical Supports and Services
Government of Alberta	Alberta Human Services, Director of Emergency Management and Business Continuity Services

Stakeholder Organization	Stakeholder Information
Government of Alberta	Alberta Human Services, Emergency Services Analyst
Government of Alberta	Alberta Municipal Affairs, Associate Minister, Recovery and Reconstruction for High River
Government of Alberta	Alberta Municipal Affairs, Associate Minister, Recovery and Reconstruction of Southeast Alberta
Government of Alberta	Alberta Municipal Affairs, Associate Minister, Recovery and Reconstruction of Southwest Alberta
Government of Alberta	Alberta Municipal Affairs, Chief of Staff for Municipal Affairs Deputy Minister
Government of Alberta	Alberta Municipal Affairs, Deputy Minister
Government of Alberta	Alberta Municipal Affairs, Minister and Flood Recovery Task For Co-Chair
Government of Alberta	Alberta Municipal Affairs (Housing), Manager of Administrative Services and Emergency Planning
Government of Alberta	Alberta Municipal Affairs (Housing), Manager, Strategic Projects
Government of Alberta	Alberta Public Affairs Bureau, Executive Director, Shared Services & Innovation
Government of Alberta	Alberta Public Affairs Bureau, Executive Director, Strategic Communications Natural Resources & Environment
Government of Alberta	Alberta Transportation, Executive Director, Major Capital Projects

Stakeholder Organization	Stakeholder Information
Government of Alberta	Government of Alberta, Member of the Legislative Assembly, Calgary-Bow
Government of Alberta	Government of Alberta, Member of the Legislative Assembly, Calgary-Buffalo
Government of Alberta	Government of Alberta, Member of the Legislative Assembly, Calgary-Klein
Government of Alberta	Government of Alberta, Member of the Legislative Assembly, Mountain View
Government of Alberta	Government of Alberta, Member of the Legislative Assembly, Highwood
Government of Alberta	Government of Alberta, Member of the Legislative Assembly, Lethbridge West
Government of Alberta	Government of Alberta, Member of the Legislative Assembly, Medicine Hat
Government of Alberta	River Forecasting Centre, Manager, River Forecasting Team
Government of Alberta	River Forecasting Centre, River Flow Forecaster
Government of Alberta	River Forecasting Centre, River Forecast Engineer
Municipalities	City of Calgary, Director of Emergency Management
Municipalities	City of Lethbridge, Deputy Fire Chief
Municipalities	City of Lethbridge, Deputy Fire Chief, Operations Section for Chief Recovery

Stakeholder Organization	Stakeholder Information
Municipalities	City of Lethbridge, Fire Chief, IMT
Municipalities	City of Lethbridge, Manager, Public Safety Communications Centre
Municipalities	City of Medicine Hat, Director of Emergency Management
Municipalities	City of Medicine Hat, Emergency Health & Social Services
Municipalities	City of Red Deer, Director of Emergency Management
Municipalities	Clearwater County, Chief Administrative Officer
Municipalities	Clearwater County, Director, Corporate Services
Municipalities	Clearwater County, Director, Public Works
Municipalities	Clearwater County, Manager, Infrastructure
Municipalities	Cypress County, Fire Chief
Municipalities	Cypress County, Public Works
Municipalities	Cypress County, Treasurer
Municipalities	Kananaskis Improvement District, Chief Administrative Officer
Municipalities	Kananaskis Improvement District, Former Director of Emergency Management
Municipalities	Mountain View County – Sundre, Chief Administrative Officer, Mountain View County
Municipalities	Mountain View County – Sundre, Deputy Director of Emergency Management for Sundre
Municipalities	Mountain View County – Sundre, Director of Emergency Management for Sundre

Stakeholder Organization	Stakeholder Information
Municipalities	Municipal District of Bighorn, Chief Administrative Officer
Municipalities	Municipal District of Bighorn, Director of Emergency Management
Municipalities	Municipal District of Foothills, Chief Administrative Officer
Municipalities	Municipal District of Foothills, Director of Emergency Management
Municipalities	Municipal District of Ranchlands, Chief Administrative Officer & Director of Emergency Management
Municipalities	Municipal District of Ranchlands, District Staff Member
Municipalities	Municipal District of Willow Creek, Chief Administrative Officer
Municipalities	Municipal District of Willow Creek, Manager of Emergency Services
Municipalities	Rocky View County, Director of Disaster Services & Manager of Infrastructure and Operations
Municipalities	Town of Banff, Chief Administrative Officer
Municipalities	Town of Black Diamond, Chief Administrative Officer
Municipalities	Town of Black Diamond, Fire Chief
Municipalities	Town of Black Diamond, Mayor
Municipalities	Town of Canmore, Chief Administrative Officer
Municipalities	Town of Canmore, Director of Emergency Management
Municipalities	Town of Canmore, Mayor
Municipalities	Town of Cochrane, Director of Emergency Management

Stakeholder Organization	Stakeholder Information
Municipalities	Town of Drumheller, Chief Administrative Officer & Director of Disaster Services
Municipalities	Town of Fort Macleod, Chief Administrative Officer & Director of Emergency Management
Municipalities	Town of High River, Chief Administrative Officer
Municipalities	Town of High River, Mayor
Municipalities	Town of Okotoks, Chief Administrative Officer & Director of Emergency Management
Municipalities	Town of Pincher Creek, Chief Administrative Officer
Municipalities	Town of Pincher Creek, Fire Chief, DEM
Municipalities	Town of Pincher Creek, Town Operations
Municipalities	Town of Redcliff, Chief Administrative Officer
Municipalities	Town of Turner Valley, Chief Administrative Officer
Municipalities	Town of Turner Valley, Director of Emergency Management
Municipalities	Town of Turner Valley, Mayor
Municipalities	Vulcan County, Chief Administrative Officer
Municipalities	Vulcan County, Director of Operations
Municipalities	Vulcan County, Director of Protective Services
Municipalities	Waterton Lakes National Park, Chief Administrative Officer for Waterton Lakes National Park and Town of Raymond
First Nations	Siksika First Nation, Fire Chief

Stakeholder Organization	Stakeholder Information
First Nations	Siksika First Nation, Nation Rebuild Team Project Coordinator
First Nations	Siksika First Nation, Tribal Manager
First Nations	Siksika First Nation, Chief Financial Officer
First Nations	Siksika First Nation, Public Works Senior Manager
First Nations	Siksika First Nation, Housing Coordinator on Rebuild Team
First Nations	Stoney First Nation, Recovery Project Manager
First Nations	Stoney First Nation, Manager of Emergency Services
First Nations	Stoney First Nation, Manager of Emergency Services
First Nations	Stoney First Nation, Acting Tribal Administrator
External Agencies / Organisations	Alberta NGO Council
External Agencies / Organisations	Calgary Emergency Management Agency
External Agencies / Organisations	Calgary River Action Group
External Agencies / Organisations	Canadian Red Cross
External Agencies / Organisations	Canadian Red Cross
External Agencies / Organisations	City of Calgary, Recovery

Stakeholder Organization	Stakeholder Information
External Agencies / Organisations	City of Calgary, Recovery
External Agencies / Organisations	City of Calgary, Recovery
External Agencies / Organisations	City of Calgary, Recovery
External Agencies / Organisations	CN / CP Rail
External Agencies / Organisations	Government of Canada, Aboriginal Affairs and Northern Development
External Agencies / Organisations	Government of Canada, Department of National Defence
External Agencies / Organisations	Government of Canada, Health Canada
External Agencies / Organisations	Government of Canada, Industry Canada
External Agencies / Organisations	Government of Canada, Public Safety Canada
External Agencies / Organisations	Government of Canada, Transport Canada
External Agencies / Organisations	High River Advocacy Group
External Agencies / Organisations	Insurance Advisory Committee

Stakeholder Organization	Stakeholder Information
External Agencies / Organisations	Insurance Advisory Committee
External Agencies / Organisations	Insurance Advisory Committee
External Agencies / Organisations	Royal Canadian Mounted Police, High River
External Agencies / Organisations	Royal Canadian Mounted Police, K Division
External Agencies / Organisations	Royal Canadian Mounted Police, K Division
External Agencies / Organisations	TransAlta
International Groups and Agencies	Cable News Network (CNN)
International Groups and Agencies	City of Lafayette Police Department
International Groups and Agencies	Con Edison Inc. Emergency Management
International Groups and Agencies	Louisiana Department of Agriculture & Forestry
International Groups and Agencies	Louisiana State University (LSU)
International Groups and Agencies	New South Wales Fire & Rescue

Stakeholder Organization	Stakeholder Information
International Groups and Agencies	New South Wales Police & Emergency Services
International Groups and Agencies	New York City Office of Emergency Management
International Groups and Agencies	State of Louisiana
International Groups and Agencies	United Stated Armed Forces
International Groups and Agencies	United States Federal Emergency Management Agency (FEMA)

Appendix B – Sample Interview Questions

Interagency Emergency Response and Coordination
Overall, how would you assess interagency emergency response and coordination? (Highly Ineffective, Ineffective, Effective, Highly Effective)
Is there a clearly defined mandate and identified lead for interagency coordination? Are these documented, well known and easy to access?
Is legislation and policy effective and understood?
Were roles, responsibilities, accountabilities and authority levels clear? Are these documented, well known and easy to access?
Were there any issues with communications (e.g. information passage, information management etc.) inside of Government of Alberta?
Were there any issues with communications (e.g. information passage, information management etc.) with municipalities?
Were there any issues with communications (e.g. information passage, information management etc.) with external agencies involved in response and recovery?
Were there any issues with communications and messages to the public?
How were elected officials involved in coordinating response efforts? What were they able to contribute? What recommendations could be made to best take advantage of their involvement?
Were standard operating procedures and processes in place? Were they well documented, well known and easy to access?
Were there any staffing or human resource issues?
Were there sufficient resources (e.g. operations centres, IT equipment etc.) to facilitate interagency coordination?
Has an after action review been completed? If so, is there a plan to address areas for improvement? Are there any issues or potential issues with the improvement plan?

Public Alerting, Community Evacuation and Communications
Overall, how would you assess the effectiveness of the province's public alerting to support community evacuation? (Highly Ineffective, Ineffective, Effective, Highly Effective)
Were roles, responsibilities, accountabilities and authority levels clear with respect to public alerting and the province's support to community evacuations? Are these documented, well known and easy to access?

Public Alerting, Community Evacuation and Communications
Did the Alberta Emergency Alert (AEA) System function as intended? How would you improve the system?
Were there any communications issues with communities regarding public alerting and the province's support for community evacuations? Please describe.
Has an after action review been completed? If so, is there a plan to address areas for improvement? Are there any issues or potential issues with the improvement plan?

Evacuee Support and Interim Accommodation
Overall, how would you assess the province's evacuee support and interim accommodation? (Highly Ineffective, Ineffective, Effective, Highly Effective)
Is there a clearly defined mandate and identified provincial lead (ministry or organisation) for evacuee support and interim accommodation? Is this information documented, well known and easy to access?
Were roles, responsibilities, accountabilities and authority clear? Are these documented, well known and easy to access?
Were there any issues with communications (e.g. information passage, information management etc.) inside of Government of Alberta?
Were there any issues with communications (e.g. information passage, information management etc.) with municipalities?
Were there any issues with communications (e.g. information passage, information management etc.) with external agencies involved in emergency accommodations?
Were there any issues with communications and messages to the public and impacted communities?
Was there a plan and standard operating procedures and processes in place? Was the plan documented, well known and easy to access?
Were there any staffing or human resource issues?
Has an after action review been completed? If so, is there a plan to address areas for improvement? Are there any issues or potential issues with the improvement plan?

Transition from Response to Recovery
Overall, how would you assess the procedures and effectiveness of the shift from response to recovery? (Highly Ineffective, Ineffective, Effective, Highly Effective)
Was there a clearly defined mandate and identified lead transition from response to recovery? Is it documented and easy to access?

Were there a predetermined plan, system and/or process (e.g. criteria, measures, tracking, decision making etc.) for transitioning from response to recovery?
Was the transition timed correctly (e.g. too early or too late)?
Were there any issues with communications (e.g. information passage, information management etc.) inside of Government of Alberta?
Were there any issues with communications (e.g. information passage, information management etc.) to municipalities?
Were there any issues with communications (e.g. information passage, information management etc.) with external agencies involved in the transition from response to recovery?
Were there any issues with communications and messages to the public?
Has an after action review been completed? If so, is there a plan to address areas for improvement? Are there any issues or potential issues with the improvement plan?

Health and Safety
Overall, how would you assess the province's provision of emergency medical and social supports to impacted communities? (Highly Ineffective, Ineffective, Effective, Highly Effective)
Is there a clearly defined mandate and identified lead for medical and social supports to communities? Is it documented and easy to access?
Were roles, responsibilities, accountabilities and authority clear? Are these documented, well known and easy to access?
Were there any issues with communications (e.g. information passage, information management etc.) inside of Government of Alberta?
Were there any issues with communications (e.g. information passage, information management etc.) with municipalities?
Were there any issues with communications (e.g. information passage, information management etc.) with external agencies involved in medical and social supports?
Were there any issues with communications and messages to the public?
Were there plans and standard operating procedures and processes in place? Were they documented, well known and easy to access?
Were there any staffing or human resource issues?
Were there sufficient resources (e.g. operations centres, IT equipment etc.) to facilitate medical and social support activities?
Has an after action review been completed? If so, is there a plan to address areas for improvement? Are there any issues or potential issues with the improvement plan?

Provincial State of Emergency
Overall, how would you assess the province's processes, procedures and implementation of the Provincial State of Emergency? (Highly Ineffective, Ineffective, Effective, Highly Effective)
Was there a clearly defined mandate and decision making process for declaring a Provincial State of Emergency?
Is legislation and policy effective and understood?
Were roles, responsibilities, accountabilities and authority clear? Were they documented, well known and easy to access?
Was there a documented procedure for declaring a provincial state of emergency?
Were there any issues with communications to the municipality?
Has an after action review been completed?

Recovery Activities
Overall, how would you assess the effectiveness and efficiency of the province in addressing immediate and long term recovery needs? (Highly Ineffective, Ineffective, Effective, Highly Effective)
What is your view on the creation of the Flood Recovery Task Force (FRTF)? Was it activated at the right time?
Were roles, responsibilities, accountabilities and authority levels clear?
What were/are the main issues and challenges faced by the FRTF?
How effective is the Disaster recovery Program (DRP)? What are/were the key issues with the DRP?

Summary and Conclusion
Overall, from your perspective, what is your assessment of the province of Alberta's 2013 flood response and recovery efforts? (Highly Ineffective, Ineffective, Effective, Highly Effective)
What were the main strengths with respect to the response and recovery?
What do you believe are the main areas for improvement?
What main recommendations would you have to improve for the future?

Appendix C - Flood Recovery Task Force Recommendations

The Flood Recovery Task Force's Lessons Learned report, dated June 2014, provided the following recommendations. These recommendations address several key factors that are critical to the success of the next recovery effort and the GoA's overall preparedness for future disaster events. Key findings were captured across four themes:

- Processes
- Resources
- Communications
- Information Management

#	Theme	Recommendation
1	Processes	Prepare a Recovery Operations Manual (ROM) to assist future recovery events
2	Processes	Create a full-time GoA recovery team
3	Processes	Establish a standing sub-committee of Cabinet on Public Safety Governance
4	Processes	Use existing systems and approaches to operationalize standing agreements where possible, to avoid redundancy
5	Processes	Implement a deliberate process for transition from response to recovery
6	Processes	Ensure legal entity status / legal staff are in place from the start of a disaster event
7	Processes	Establish an enhanced and easy-to-navigate Disaster Recovery Program (DRP)
8	Processes	Establish a formal disaster recovery role for Deputy Ministers
9	Processes	Ensure mitigation continues to be resource adequately
10	Resources	Develop a pool of employees pre-trained on emergency recovery
11	Resources	Adopt a proactive approach to secondments
12	Resources	Ensure consistency and stability of leadership
13	Resources	Immediately establish emergency support elements
14	Communications	Establish clear communications processes across government and with affected communities
15	Communications	Utilize a government-wide approach to decision making
16	Communications	Establish a Flood Recovery Task Force organization chart
17	Communications	Clearly communicate expectations and policy
18	Communications	Cabinet confidentiality
19	Information Management	Ensure an Information / Knowledge Manager is part of the task force staff

#	Theme	Recommendation
20	Information Management	Implement a standard tracking process for all projects

Appendix D – Comparison of Provincial / Territorial Disaster Recovery Programs

Province / Territory	Overview	Eligible Groups	Maximum Amount Covered	Relevant Legislation, Policies & Guidelines
Alberta	Alberta's **Disaster Recovery Program** is designed to cover those losses and damages for which insurance was not readily and reasonably available at the time of event. Funding is available to cover the costs of returning essential property to the condition it was in before the disaster happened. Note that based on feedback from the 2013 floods, the DRP has already been updated with key changes. As well, in an effort to close all DRP files by June, the Province announced in January, 2015 that 90% of eligible funding will be advanced to Albertans with open DRP files from the 2013 Southern Alberta floods.	• Individuals • Small businesses (including farming operations) • Not-for-profit organizations (including not-for-profit cooperatives) • Municipalities • Government departments • First Nation communities	The Alberta Disaster Assistance guidelines outline 'General Limitations', which provide maximum funding amounts for specific items. There are no overall maximum amounts specified for eligible parties.	Alberta Disaster Assistance Guidelines; Disaster Recovery Regulation 51/94 of the Alberta Emergency Management Act

Province / Territory	Overview	Eligible Groups	Maximum Amount Covered	Relevant Legislation, Policies & Guidelines
British Columbia	British Columbia's **Disaster Financial Assistance Program** provides financial assistance to restore uninsurable private property and/or public infrastructure damaged in the disaster. Claims can be made for events which are uninsurable, including overland flooding and groundwater seepage. Funding is available to cover the cost of replacing or repairing essential items and property to their immediate pre-disaster condition.	• Home owners • Residential tenants • Small businesses • Farms • Charitable organizations • Local authorities • First Nation communities	For private claims: 80% of the amount of total eligible damage that exceeds $1000. The maximum amount payable is $300,000. Applications can be submitted in more than one category. For local authorities: 100% for response claims, 80% of the total eligible damage that exceeds $1000 for recovery claims.	Section 20 of the Emergency Program Act, R.S.B.C. 1996, and the ensuing Compensation and Disaster Financial Assistance Regulation, B.C. Reg 124/95 (the Regulation).
Manitoba	Manitoba's **Disaster Financial Assistance Program** provides provincial assistance for certain disaster-related losses when a widespread disaster strikes and creates an unreasonable financial burden. The Program is intended to provide financial assistance to restore property to a habitable and functional state (or 'pre-disaster' condition). Assistance is not available for insurable losses.	• Property owners • Tenants • Small business owners • Agricultural operations • Non-profit organizations • First Nation communities	For private claims, the maximum amount payable is $240,000 For municipalities or private residents using their own equipment during a disaster the percentage of costs reimbursed is 65%. Province/Municipality sliding cost sharing scale capped at five dollars per capita for municipal expenditures, after which the province assumes 100% of the costs.	The Emergency Measures Act - Disaster Financial Assistance Policies and Guidelines (Private Sector) (CCSM c. E80)

Province / Territory	Overview	Eligible Groups	Maximum Amount Covered	Relevant Legislation, Policies & Guidelines
New Brunswick	New Brunswick's **Disaster Financial Assistance Program** covers damages and losses that threaten the health and safety of individuals and communities. The program does not pay for any damage or loss that is covered by an insurance policy - it is designed to cover the cost of essential / basic need items.	• Private homeowners • Residential tenants • Small businesses • Farmers • Fishermen • Municipalities	For private claims: Assistance for a homeowner's structural damages is capped at $120,000. There is also an additional allowance for specific personal property items, such as appliances and clothing. For farms, fishermen and small businesses the maximum amount payable is $500,000.	Disaster Assistance to Municipalities Regulation, NB Reg. 83-71 New Brunswick recently undertook a public consultation to update their DFA program. This consultation ended on November 16, 2014. Results have not yet been published.
Newfoundland	Newfoundland and Labrador's **Disaster Financial Assistance Program** is designed to provide basic financial assistance to help individuals, small business, charitable/non-profit/cooperative organizations, municipalities, and farm operations meet the cost of disasters which exceed what they might reasonably be expected to bear on their own. Does not cover negligence or deterioration of property and infrastructure.	• Individuals • Small businesses • Charitable/non-profit/cooperative organizations • Farm operations • Municipalities	The province reserves the right to establish a maximum amount payable, but no figures are laid out in the policy statement.	Newfoundland and Labrador Disaster Financial Assistance Program (NL-DFAP) Policy Statement

Province / Territory	Overview	Eligible Groups	Maximum Amount Covered	Relevant Legislation, Policies & Guidelines
Northwest Territories	The Northwest Territories' **Disaster Financial Assistance Program** provides financial assistance to help community governments, small businesses and residents recover from disasters which lead to widespread damage and have resulted in uninsurable property and infrastructure damage. The program is meant to restore items back to their pre-disaster state, and does not replace insurance.	• Residential Tenants • Home Owners • Small Business Owners • Community Governments	For private claims, the maximum amount payable is $100,000. Applicants may apply to one or more categories. The province will reimburse each accepted claim up to 80% percent. For community governments, there is no maximum amount payable is specified, but the guidelines state this program is not intended to provide full compensation for damage.	Disaster Assistance Policy
Nova Scotia	Nova Scotia's **Disaster Financial Assistance Program** is designed to help local residents, farmers, small businesses and not-for-profit organizations to recover from emergency-related damage. The program covers uninsurable damages to homes, small businesses or not-for-profit organizations.	• Individuals • Farmers • Small businesses • Non-profit organizations • Municipalities	For individuals and small businesses, the maximum amount payable is $80,000. For not-for-profit, the maximum amount is $200,000.	Federal Disaster Financial Assistance Agreement guidelines
Nunavut	No program information available	Not specified	Not specified	Federal Disaster Financial Assistance Arrangements guidelines

Province / Territory	Overview	Eligible Groups	Maximum Amount Covered	Relevant Legislation, Policies & Guidelines
Ontario	The **Ontario Disaster Relief Assistance Program** provides financial assistance to cover the costs of returning essential items to pre-disaster condition for people who have suffered damage in designated disaster areas after a natural disaster. Only uninsured damages within the declared disaster area are eligible for funding. When the Minister of Municipal Affairs and Housing declares a disaster area which includes private damages, there is a requirement for local fund-raising and ongoing municipal involvement. A volunteer Disaster Relief Committee must be appointed to lead fundraising and oversee claim decisions. Local fundraising is a requirement under the private component.	• Private homeowners • Farmers • Small business • Non-profit organizations • Municipalities	For private claims, the province may match funds raised through the Disaster Relief Committee up to a 2 to 1 ratio to settle the claims, up to 90 per cent of eligible costs. There is no maximum eligible amount, but there are capped amounts for many items. As well, there is a requirement for fundraising through the Disaster Relief Committee to assist with funding private claims. Municipalities within the declared disaster area may receive assistance of up to 100% of eligible costs for uninsured municipal damage associated with a disaster.	Ontario Disaster Assistance Relief Guidelines
Prince Edward Island	Prince Edward Island's **Provincial Disaster Assistance Program** is intended to help repair or replace uninsurable, essential, basic property lost or damaged as a result of a sudden disaster of unusual proportions. The Program is not an alternative to adequate private insurance coverage and sound risk management practices.	• Individuals • Small Businesses • Farm Operators • Not-for-profit Organizations • Municipalities	A maximum amount is not specified.	Provincial Disaster Assistance Program guidelines

Province / Territory	Overview	Eligible Groups	Maximum Amount Covered	Relevant Legislation, Policies & Guidelines
Quebec	Quebec's **Financial Assistance to Disaster Victims Program** provides financial assistance in the event of an actual or imminent disaster that risks compromising human safety or causing property damage. This program is not intended to replace coverage offered by insurers.	• Individuals • Businesses • Municipalities	For private claims, the province may offer up to 80% of eligible costs. The maximum amount payable is $150,000. This amount is indexed each year to the rate corresponding to the Quebec average rise of the consumer price index for the year before the disaster.	General Financial Assistance Program regarding Actual or Imminent Disaster guidelines
Saskatchewan	Saskatchewan's **Provincial Disaster Assistance Program** is designed to provide financial assistance to help recover from the effects of natural disasters, including flooding, tornadoes, plow winds and other severe weather. The Program is not a substitute for private insurance nor does it provide full compensation for losses. Instead, the program covers damages to uninsurable, essential property. The Program provides assistance to return property to its pre-disaster value; this includes applying depreciation for age of and condition of property. Expenses beyond that value are not covered.	• Residents • Small businesses • Agricultural operations • Communal organizations • Non-profit organizations • Parks and communities • First Nation communities	For private claims: 95% of all expenses incurred for eligible disasters are covered. For principal residences, the maximum amount payable is $240,000. For small businesses (including agricultural operations and communal organisations) and non-profit organizations, the maximum amount payable is $500,000. For private claims requiring a temporary relocation, the maximum amount payable is $30,000. For Municipal, Regional Park Authorities and Park Authorities: Once the deductible is paid, 100% of all eligible expenses are covered.	The Provincial Disaster Assistance Program Regulations, 2011 - Chapter E-8.1 Reg 2

Province / Territory	Overview	Eligible Groups	Maximum Amount Covered	Relevant Legislation, Policies & Guidelines
Yukon	No program information available	Not specified	Not specified	Federal Disaster Financial Assistance Arrangements guidelines

Appendix E – Comparison of Provincial / Territorial Emergency Management Legislation

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Alberta	• Emergency Management Act - Chapter E-6.8, 2013 • Government Emergency Management Regulation – Alberta Regulation 248/2007	Alberta Emergency Management Agency	Municipalities are required to: • Prepare and approve emergency plans and programs • Appoint an emergency advisory committee to advise on the development of emergency plans and programs	The Alberta Emergency Management Agency is responsible for conducting or facilitating training for employees of the Government of Alberta or of municipalities
British Columbia	• Emergency Program Act, 1996 • Emergency Program Management Regulation, 1904 • Local Authority Emergency Management Regulation, 1995	British Columbia Provincial Emergency Program	Municipalities are required to: • Prepare local emergency plans that address preparation, response and recovery from emergencies • Establish and maintain an emergency management organization to develop and implement emergency plans and other preparedness, response and recovery measures for emergencies and disasters. Plans must be based on the local authority's assessment of the relative risk of occurrence and the potential impact on people and property of the emergencies or disasters that are most likely to occur.	Municipalities are required to: • Require a periodic review and updating of the local emergency plan and establish a procedure for that review and revision • Establish and maintain a program of emergency response exercises and a training program for all emergency response staff to whom responsibilities are assigned in the plan

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Manitoba	• The Emergency Measures Act CCSM c. E80	Manitoba Emergency Measures Organization	Municipalities are required to: • Establish a committee of members of the community to advise the authority on the development of emergency preparedness programs and emergency plans • Establish and maintain a local emergency response control group • Appoint a person from the local emergency response control group and prescribe the duties of that person including the preparation • Co-ordination of emergency preparedness programs and emergency plans for the local authority • Prepare and adopt emergency preparedness programs and emergency plans and submit them to the co-ordinator for approval and co-ordination with other emergency preparedness programs and emergency plans	No specified training and exercise requirements.

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
New Brunswick	- Emergency Measures Act RSNB 2011, c.147	New Brunswick Emergency Measures Organization	Municipalities are required to: - Establish and maintain a municipal emergency measures organization - Appoint a director of the municipal emergency measures organization and prescribe his or her duties, which shall include the preparation and coordination of emergency measures plans for the municipality - Appoint a committee consisting of members of its council to advise it on the development of emergency measures plans - Prepare and approve emergency measures plans	The province has put together a Municipal Emergency Response Plan template which indicates that plans should be exercised or tested on an annual basis.

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Newfoundland	• Emergency Services Act Chapter E-91	Newfoundland and Labrador Fire and Emergency Services	Municipalities are required to adopt an emergency management plan that designates a person to supervise and control the management of the plan. This emergency management plan: • May be developed by a committee of a council, or a council may, with the necessary changes, adopt the emergency management plan of a neighbouring municipality with the consent of that municipality. • May be a regional emergency management plan developed by two or more municipalities forming a regional emergency management committee	The Provincial Emergency Management Plan states: • Emergency management training is an essential component of the preparedness phase. • Training is coordinated at the municipal level by the province

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Northwest Territories	• Civil Emergency Measures Act	Northwest Territories Emergency Management Organization	Local Authorities are required to: • Prepare, approve and maintain emergency plans • Control and direct emergency operations within areas under their jurisdiction • Inform the Regional Superintendent of any local emergency and possible requirements for assistance • Request assistance from the territorial government through the Regional Superintendent when the Local Authority's capacity or jurisdiction is exceeded, or may be exceeded Note that the Northwest Territories is in the process of updating and modernizing their Civil Emergency Measures Act (as of April 2014).	The territorial government is responsible for providing emergency preparedness training to provincial officials only.

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Nova Scotia	• Emergency Management Act Ch.8	Nova Scotia Emergency Management Office	Municipalities are required to: • Establish and maintain a municipal emergency by-law • Establish and maintain a municipal emergency management organization Appoint a coordinator of the municipal emergency management organization and prescribe the duties of the coordinator • Appoint a committee consisting of members of the municipal council to provide advice on the development of emergency management plans • Prepare and approve emergency management plans	• The Nova Scotia Emergency Response Plan specifies that periodic and regular exercises must be conducted at the provincial and municipal levels • A Hazard Risk and Vulnerability Assessment (HRVA) is conducted at the provincial level
Nunavut	• Emergency Measures Act, S.Nu, 2007, c.10	Nunavut Emergency Management	Municipalities are required to: • Identify the risks of an emergency occurring in the community • Prepare an emergency management program in respect of those risks	Municipalities are required to: • Maintain, test and implement the program • Conduct exercises and training in relation to the program

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Ontario	• Emergency Management and Civil Protection Act: Ontario Regulation 380/04	Emergency Management Ontario	All municipalities must ensure: • Designation of a Community Emergency Management Coordinator (CEMC) • Formation of an emergency management program committee • An approved emergency response plan • Development of an appropriate community emergency operations centre • Identification of critical infrastructure • Annual training for the community control group and emergency operations centre staff • Annual exercise to evaluate the emergency response plan • Identification of individuals to act as emergency information staff • Development and implementation of an emergency management public awareness program • Annual review of the emergency management program	All municipalities must ensure: • Annual training for the community control group and emergency operations centre staff • Annual exercise to evaluate the emergency response plan • Annual review of the emergency management program

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Prince Edward Island	• Emergency Measures Act, E-06	Prince Edward Island Emergency Measures Organization	Each municipality may: • Establish and maintain a municipal emergency measures organization by passage of a bylaw • Appoint a co-ordinator of the municipal emergency organization, and prescribe duties that contain the preparation and co-ordination of emergency measures plans for the municipality • Appoint a committee to advise it on the development of emergency measures plans • Prepare and approve emergency measures plans	The provincial Emergency Measures Organization may conduct training and training exercises for the effective implementation of emergency measures plans.

Quebec	- Civil Protection Act (Bill 173)	Ministère de la sécurité publique	Regional authorities, in conjunction with the local municipalities, must establish a civil protection plan that shall: - Determine reduced major disaster vulnerability objectives for their entire territory and the actions required to achieve those objectives - Identify the nature of the major disaster risks to which the territory is exposed - Include a procedure for the periodic assessment of the actions taken pursuant to the plan and the degree to which the determined objectives have been achieved - Identify existing safety measures and the human, physical and informational resources at the disposal of local or regional authorities and civil protection authorities The civil protection plan of a regional authority may be established jointly with other regional authorities, either to identify the major disaster risks to which their territories or the territories of local municipalities are exposed as well as the resources available, or to envisage an association of civil protection authorities.	- The regional authority shall propose strategies for achieving the objectives, such as the pooling of resources, the training of personnel, the adoption of regulatory standards, the separate management of a risk or class of risks or cooperation between community organizations or civil protection associations and the private sector.

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Saskatchewan	• Emergency Planning Act, Chapter E-8.1, 2003	Saskatchewan Emergency Management Organization	Municipalities are required to: • Appoint a municipal planning committee • Establish an emergency measures organization • Appoint an Emergency Coordinator to lead a local emergency planning committee • Prepare an emergency plan The emergency plan must address: • Provision of necessary services during an emergency • Procedures under and the manner in which persons will respond to an emergency	No specified training and exercise requirements.

Province / Territory	Relevant Legislation / Policy	Provincial / Territorial Emergency Management Organization	Municipal Responsibilities	Applicable Training, Awareness, Exercise Information
Yukon	• Civil Emergency Measures Act, RSY 2002 c.34	Yukon Emergency Measures Organization	Municipalities are required to establish a municipal civil emergency plan that will: • Assign to municipal officers and employees those responsibilities necessary for the effective implementation of the plan in the case of a declaration of a state of emergency in or including the municipality • The plan may be co-ordinated with a civil emergency plan of another municipality	No specified training and exercise requirements.

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